
Vital and Mortal Statistics.



SUMMARY OF VITAL AND MORTAL STATISTICS. 1907.

Position Lat. 53° 35' N., Lon. 2° 37' W.
Elevation above sea level 230ft. to 1450ft.
Geological Formation:—Boulder Clay and Sand over
Coal Measures.

Area in Acres	...	15283
Population	...	182917
Density	...	11·9
Inhabited Houses—Census 1901	...	35995
Uninhabited Houses—Census 1901	...	3093
New Houses Certified 1901—1907 inclusive		3300
New Houses Certified 1907	...	552
Rateable Value	...	£805,121
Births	...	4476
Birth-rate	...	24·4
Deaths	...	3073
Death-rate (Corrected for Institutions)	...	16·7
Corrected Death-rate (ascertained by application of Registrar-General's Factor 1·1308)	...	18·8
Average Death-rate (1897—1906)	...	18·1
Infantile Mortality	...	145
Epidemic Death-rate (Seven Chief Diseases)		2·40
Diarrhœa Death-rate	...	·36
Diarrhœa Mortality per 1000 Births	...	14·7
Enteritis Mortality per 1000 Births	...	11·8
Phthisis Death-rate	...	1·01
Death-rate from other forms of Tuberculosis		·38
Respiratory Death-rate	...	3·26
Rainfall (21 years' average, 40)	...	45·56
76 Great Towns Death-rate	...	15·4
76 Great Towns Epidemic Death-rate	...	1·54
76 Great Towns Infantile Mortality	...	127

Population and Area.

For the middle of 1907, the estimated population was 182,917 and this on an area of 15,283 acres, or 23·8 sq. miles, gives a density of 11·9 persons per acre.

Births.

4476 births were registered, rather less than last year, equal to a birth-rate of 24·4, the lowest yet recorded. The illegitimate births numbered 171, and were 3·8 per cent. of the total births.

Deaths.

3073 deaths were registered of Bolton residents, including those who died in institutions outside the Borough. The death-rate was 16·7, the average for ten years being 18·1. There were 244 deaths in the Workhouse, 143 in the Bolton Infirmary, 49 in Lunatic Asylums, 31 in the Borough Fever Hospitals, and 13 in other institutions outside the Borough. 26 of those who died in the Infirmary and two of those in the Fever Hospitals were non-residents.

The deaths in the wards varied from 10·6 in Heaton to 23·4 in East Ward.

Nineteen per cent. of the total deaths were due to respiratory diseases, chiefly bronchitis and pneumonia; sixteen per cent. to epidemic diseases; nine per cent. to tubercular diseases; eight per cent. to old age; and the rest to various other causes in smaller percentages, as will be seen from the summary of causes of death.

TABLE I.

POPULATIONS, BIRTH-RATES, &C., IN WARDS, 1907.

WARD.	Population.	Area.	Density.	Birth-rate.	Death-rate.	Infantile Mortality.	Zymotic Death-rate.
West	27960	450	62·1	24·7	17·5	153	2·86
Halliwell	23580	358	65·8	22·7	15·7	149	1·61
Bradford	20430	285	71·6	26·7	19·6	186	3·81
Derby	20320	300	67·7	26·3	16·8	141	3·24
East	9940	160	62·1	32·3	23·4	198	3·62
Rumworth	9205	163	50·3	26·1	16·5	153	2·93
Church	8534	390	21·8	19·8	16·2	94	1·99
North	7810	150	52·0	23·8	15·1	80	1·79
Exchange	4770	105	45·4	26·2	22·4	240	3·35
Old Borough	132549	2361	56·1	25·2	17·7	156	2·80
Great Lever	11428	867	13·1	21·0	14·6	137	1·75
Tonge	10755	830	12·9	24·1	12·2	88	1·39
Astley Bridge... ..	8540	1780	4·7	20·8	14·8	123	·53
Smithills	5522	2108	2·6	21·5	14·4	92	·90
Hulton	5330	1620	3·2	25·7	14·6	138	1·68
Darcy Lever-cum-Brightmet	3475	1372	2·5	24·7	19·5	93	1·15
Deane-cum-Lostock	3255	2601	1·2	22·1	13·5	97	2·45
Heaton	2063	1744	1·1	15·0	10·6	96	·96
Added Area	50368	12922	3·8	22·2	14·2	112	1·35
Extended Borough	182917	15283	11·9	24·4	16·7	145	2·40

TABLE II.

POPULATIONS, DENSITIES, BIRTH-RATES, DEATH-RATES, AND
INFANTILE MORTALITY IN PREVIOUS YEARS.

Year.	Population.	Density.	Births.	Birth-rate.	Deaths.	Death-rate.	Infantile Mortality.
1773	5600	3'0					
1791-1800	14437	7'8					
1801-1810	20444	11'1					
1811-1820	27364	14'8					
1821-1830	37240	20'2					
*1831-1840	46579	25'3					
1841-1850	55167	29'9					
1851-1860	61645	33'5				30'7	
1861-1870	75999	41'2				29'4	
1871	83095	45'1				26'1	
1872	84072	45'6				28'0	
1873	85061	46'2				23'3	
1874	86061	46'7	3526	40'9	2219	25'7	178
1875	87073	47'3	3552	40'7	2403	27'5	193
1876	88097	47'8	3722	42'2	2199	24'9	169
1877	89133	48'4	3596	40'3	2226	24'9	169
†1878	102919	43'5	3952	38'3	2313	22'4	181
1879	103819	43'9	3897	37'5	2233	21'5	158
1880	104727	44'3	4644	44'3	2835	27'0	179
1871-1880	91405	45'8	3841	40'6	2346	24'8	175
1881	105643	44'7	3811	36'0	2022	19'1	151
1882	106567	45'1	3834	35'9	2277	21'3	170
1883	107499	45'5	3697	34'3	2157	20'0	171
1884	108439	45'9	3701	34'1	2615	24'1	194
1885	109387	46'3	3788	34'6	2282	20'8	161
1881-1885	107507	45'5	3766	34'9	2270	21'0	169
1886	110343	46'7	3786	34'3	2572	23'3	184
1887	111308	47'1	3627	32'5	2393	21'4	172
1888	112281	47'5	3729	33'2	2453	21'8	170
1889	113263	47'9	3759	33'1	2528	22'3	166
1890	114253	48'3	3726	32'5	2986	26'1	176
1886-1890	112289	47'5	3725	33'1	2586	22'9	173
1891	115253	48'8	3914	33'9	2516	21'6	165
1892	116261	49'2	3769	32'4	2648	22'6	185
1893	117278	49'6	3874	33'0	2813	23'8	200
1894	118309	50'1	3719	31'4	2215	18'5	162
1895	119337	50'5	3960	33'1	2862	23'7	213
1891-1895	117286	49'6	3847	32'7	2610	22'2	185
1896	120380	50'9	3792	31'7	2496	20'7	165
1897	121433	51'5	3985	32'8	2671	21'9	184
1898	122495	51'8	3800	31'0	2350	19'1	167
‡1899	162222	10'6	4878	30'0	3238	19'9	180
1900	164240	10'7	4775	29'0	3222	19'6	170
1896-1900	138154	35'1	4246	30'9	2795	20'2	173
1901	168748	11'0	4648	27'5	3085	18'2	172
1902	171082	11'1	4779	27'9	2959	17'2	132
1903	173401	11'3	4700	27'1	3062	17'6	151
1904	175744	11'4	4736	26'9	2994	17'0	167
1905	178111	11'6	4481	25'1	2754	15'4	166
1901-1905	173417	11'2	4668	26'8	2968	17'0	157
1906	180502	11'8	4599	25'4	2794	15'4	138
1907	182917	11'9	4476	24'4	3073	16'7	145

* Incorporation in 1838 with 48,000 population and 1,840 acres.

† Added in 1878 part of Rumworth with 163 acres and 3,000 population, and part of Halliwell with 358 acres and 10,000 population.

‡ Borough extended and 38,000 added to the population.

BIRTH-RATES, DEATH-RATES, AND INFANTILE MORTALITY IN 33 GREAT
TOWNS, 1907 (REGISTRAR GENERAL'S RETURNS).

Towns	Birth-rate	Death-rate	Epidemic Death-rate	Infantile Mortality
76 Great Towns	... 27·0	... 15·4	... 1·54	... 127
Croydon	... 25·6	... 12·4	... ·88	... 93
Leicester	... 23·2	... 12·6	... ·90	... 132
Southampton	... 23·1	... 13·0	... ·81	... 109
Bristol	... 24·3	... 13·1	... ·79	... 99
Halifax	... 17·4	... 14·3	... ·68	... 104
Derby	... 25·1	... 14·3	... 1·61	... 120
London	... 25·7	... 14·5	... 1·41	... 115
West Ham	... 28·5	... 14·6	... 2·18	... 131
Norwich	... 24·9	... 14·6	... 1·31	... 124
Brighton	... 21·0	... 14·7	... ·83	... 112
Plymouth	... 23·1	... 14·7	... ·85	... 109
Bradford	... 19·9	... 14·7	... ·89	... 124
Cardiff	... 26·0	... 14·9	... 1·90	... 132
Birkenhead	... 31·2	... 15·3	... 1·96	... 109
Leeds	... 24·9	... 15·3	... 1·25	... 132
Gateshead	... 30·7	... 15·4	... 1·56	... 137
Newcastle-on-Tyne	... 29·7	... 15·9	... 1·36	... 123
Portsmouth	... 28·1	... 16·0	... 1·83	... 123
Birmingham	... 28·3	... 16·1	... 1·77	... 148
Hull	... 28·8	... 16·1	... 1·78	... 127
Rhondda	... 37·1	... 16·2	... 1·89	... 162
South Shields	... 28·9	... 16·7	... 1·36	... 133
(L) BOLTON	... 24·4	... 16·7	... 2·40	... 145
(L) Blackburn	... 24·8	... 16·9	... 1·36	... 154
Sheffield	... 30·9	... 17·0	... 2·65	... 146
Nottingham	... 26·8	... 17·5	... 2·25	... 165
(L) Salford	... 29·2	... 17·6	... 2·13	... 141
(L) Burnley	... 28·5	... 17·6	... 1·41	... 158
(L) Manchester	... 28·7	... 18·1	... 1·73	... 147
(L) Liverpool	... 31·8	... 19·0	... 2·00	... 145
(L) Preston	... 26·7	... 19·0	... 1·66	... 158
Sunderland	... 34·2	... 19·1	... 1·84	... 130
(L) Oldham	... 26·4	... 19·3	... 1·51	... 144

(L) Lancashire Towns.

SUMMARY OF CAUSES OF DEATH, 1907.

General Diseases.

	No. of Deaths	Per cent of Total Deaths	Death-rate per 1000 of pop'n.
1. Specific Febrile or Epidemic Diseases	504	16·4	2·75
2. Constitutional Diseases :—			
(a) Phthisis	186	6·0	1·01
(b) Other Tubercular	70	2·2	·38
(c) Cancer	120	3·9	·65
3. Developmental Diseases :—			
(a) Premature Birth	105	3·4	·57
(b) Old Age	236	7·6	1·29

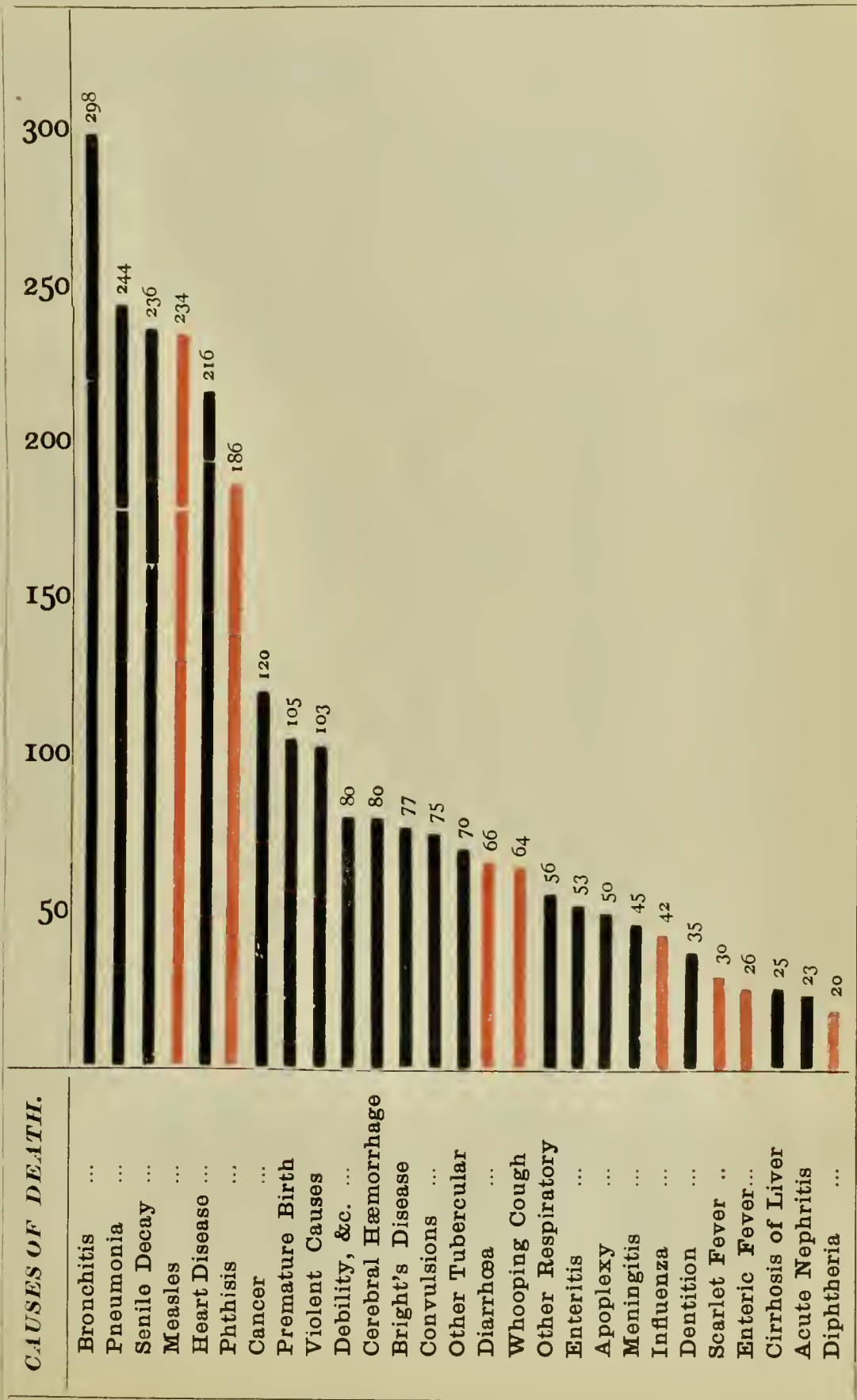
Local Diseases.

1. Nervous System	196	6·3	1·07
2. Organs of Special Sense	12	·3	·06
3. Heart	216	7·0	1·18
4. Blood Vessels	140	4·5	·76
5. Respiratory System :—			
(a) Bronchitis	298	9·6	1·62
(b) Pneumonia	244	7·9	1·33
(c) Other Respiratory	56	1·8	·30
6. Digestive System	188	6·1	1·02
7. Urinary System	108	3·5	·59
8. Pregnancy and Child Birth	24	·7	·13
Ill-Defined and not Specified Diseases...	87	2·8	·47

Violent Causes.

1. Accidents	86	2·7	·47
2. Suicide	17	·5	·09

Comparative View of the Principal Causes of Death
1907.



CAUSES OF DEATH.

■ Deaths from Zymotic Diseases.
 ■ Deaths from Diseases other than Zymotic.

Infantile Mortality.

652 or 21 per cent. of the total deaths were those of children under one year of age, equal to an infantile mortality of 145 per 1,000 births, and a death-rate per 1,000 of the population of 3.5, lower than the average for 1896—1905, which was 162. The average for the 76 great towns was 127.

It will be noticed that the infantile mortality was as much as 240 in Exchange Ward, 195 in East Ward, and 186 in Bradford Ward.

Ward.	Births	Deaths under 1 year	Infantile Mortality
West	691	106	153
Halliwell	536	80	149
Bradford	547	102	186
Derby	536	76	141
East	322	64	195
Rumworth	241	37	153
Church	169	16	94
North	186	15	80
Exchange	125	30	240
Great Lever	240	33	137
Tonge	260	23	88
Astley Bridge	178	22	123
Smithills	119	11	92
Hulton	137	19	138
Darcy Lever-cum-Brightmet	86	8	93
Deane-cum-Lostock	72	7	97
Heaton	31	3	96

The causes of death under one year were as follows:—

	1906.	1907.
Diarrhœa	147	47
Enteritis	17	19
Respiratory Diseases	74	100
Debility, &c.	103	78
Premature Birth	96	105
Convulsions	53	63
Whooping Cough	11	30
Measles	1	64
	<hr/>	<hr/>
Other Various Causes	502	506
	134	146
	<hr/>	<hr/>
	636	652

Mortality from Epidemic Diseases.

440 deaths were registered from the seven chief epidemic diseases, equal to a death-rate of 2.40 lower than the average for the last ten years, which was 2.55. It is higher than that for the 76 great towns, which was 1.54.

The causes of death are set out here, and the death-rates in previous years in Table IV.

CAUSES OF DEATH FROM ALL EPIDEMIC DISEASES.

		1906.	1907.
Seven Chief Epidemic Diseases.	Small-pox	—	—
	Scarlet Fever	17	30
	Diphtheria and Membranous Croup..	24	20
	Enteric, Continued Fever	40	26
	Diarrhœa	208	66
	Measles	2	234
	Whooping Cough	20	64
	Influenza	27	42
	Other Epidemic Diseases	22	22
Total		360	504

TABLE III.

DEATH-RATES FROM THE SEVEN EPIDEMIC DISEASES, 1886-1907.

			Small- pox.	Scarlet Fever	Diph- theria and Membr. Croup.	Fever.	Measles	Whooping Cough.	Diarrhœa	Seven Chief Epi- demic.
1886	...	...	—	'14	'06	'16	1'23	'67	1'39	4'4
1887	...	...	—	'32	'06	'31	'80	'24	1'29	3'06
1888	...	...	—	'45	'06	'33	'29	'50	'99	2'6
1889	...	...	—	'56	'25	'27	1'39	'55	'91	4'1
1890	...	...	—	'48	'12	'22	'83	'92	'94	3'53
1891	...	...	—	'18	'08	'27	'47	'38	'81	2'22
1892	...	...	—	'25	'11	'17	'36	'92	1'10	2'95
1893	...	...	'05	'28	'05	'28	1'38	'66	1'67	4'42
1894	...	...	—	'08	'04	'21	'16	'51	'57	1'59
1895	...	...	—	'17	'12	'41	1'00	'56	1'74	4'03
1896	...	...	—	'32	'07	'41	'04	'83	'85	2'50
1897	...	...	—	'18	'03	'29	1'77	'32	1'63	4'16
1898	...	...	—	'16	'06	'28	'25	'36	1'80	2'93
1899	...	...	—	'22	'08	'33	'57	'27	1'59	3'08
1900	...	...	—	'12	'12	'29	'22	'50	1'13	2'40
1901	...	...	—	'30	'15	'23	'64	'29	1'42	3'05
1902	...	...	'04	'68	'27	'23	'18	'30	'40	2'12
1903	...	...	'01	'34	'21	'20	'28	'05	'87	1'98
1904	...	...	'005	'12	'16	'21	'09	'76	'88	2'25
1905	...	...	—	'02	'09	'19	'51	'04	1'01	1'88
1906	...	...	—	'09	'13	'22	'01	'11	1'15	1'72
Average			} 005	'22	'13	'24	'45	'30	1'18	2'55
1897-1906										
1907	...	...	—	'16	'10	'14	1'27	'34	'36	2'40

TABLE IV.

33 GREAT TOWNS.—DEATH-RATES PER 1000 LIVING FROM ALL CAUSES, AND FROM THE PRINCIPAL EPIDEMIC DISEASES, AND INFANT MORTALITY IN THE TEN YEARS 1896-1905, AND IN 1906.

TOWNS.	All Causes.		Small-pox.		Measles.		Scarlet Fever.		Diphtheria.		Whooping-Cough.		Fever.		Diarrhoea.		Deaths under One Year to 1000 Births.	
	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906.	Ten Years 1896-905	1906
76 TOWNS	?	15.9	?	0.00	?	0.40	?	0.12	?	0.19	?	0.28	?	0.09	?	1.16	?	145
London	17.3	15.1	0.03	...	0.51	0.41	0.12	0.11	0.32	0.15	0.41	0.26	0.11	0.06	0.81	0.04	150	131
Croydon	13.6	13.4	0.01	...	0.24	0.26	0.05	0.05	0.16	0.27	0.30	0.19	0.07	0.03	0.65	0.06	133	127
West Ham	17.4	15.7	0.66	...	0.54	0.43	0.12	0.13	0.50	0.29	0.56	0.26	0.22	0.18	1.45	0.55	167	150
Brighton	16.2	14.7	...	...	0.28	0.22	0.05	0.02	0.27	0.09	0.20	0.19	0.10	0.02	0.75	0.55	143	111
Portsmouth	17.2	14.9	...	...	0.36	0.04	0.10	0.01	0.36	0.29	0.31	0.31	0.24	0.08	1.14	1.11	153	130
Southampton...	16.3	13.1	0.01	...	0.37	...	0.07	...	0.24	0.21	0.29	0.31	0.13	0.05	0.87	0.80	143	113
Norwich	17.8	17.7	...	...	0.43	0.84	0.09	0.08	0.17	0.25	0.30	0.17	0.17	0.10	1.12	1.55	176	172
Plymouth	18.5	16.2	0.00	0.02	0.46	0.44	0.10	0.08	0.13	0.18	0.27	0.47	0.10	0.05	0.91	0.72	165	152
Bristol...	16.5	14.5	0.00	0.00	0.47	0.39	0.12	0.08	0.26	0.21	0.35	0.28	0.11	0.06	0.60	0.54	138	127
Birmingham	19.8	16.8	0.00	...	0.45	0.40	0.21	0.10	0.26	0.18	0.48	0.45	0.19	0.07	1.34	1.58	185	168
Leicester	16.3	14.3	0.01	...	0.33	0.35	0.15	0.22	0.48	0.13	0.29	0.49	0.11	0.06	1.25	1.13	176	168
Nottingham	18.1	16.1	0.01	...	0.43	0.02	0.14	0.07	0.15	0.16	0.34	0.16	0.26	0.17	1.17	1.52	181	171
Derby...	15.8	14.2	0.01	...	0.30	0.02	0.13	0.03	0.12	0.50	0.28	0.23	0.16	0.09	0.73	0.53	153	115
Birkenhead	18.4	17.3	0.01	...	0.44	0.08	0.18	0.26	0.23	0.23	0.42	0.50	0.24	0.15	1.04	1.75	167	151
Liverpool	22.4	20.6	0.03	0.00	0.47	0.78	0.29	0.25	0.25	0.20	0.47	0.48	0.23	0.12	1.55	1.79	186	172
Bolton	18.6	15.2	0.01	...	0.46	0.01	0.25	0.09	0.13	0.12	0.38	0.11	0.26	0.24	1.20	1.15	167	140
Manchester	21.9	19.2	0.01	...	0.73	0.75	0.19	0.18	0.18	0.19	0.47	0.31	0.16	0.13	1.36	1.53	183	167
Salford	21.7	18.3	0.00	...	0.84	0.80	0.33	0.19	0.35	0.39	0.55	0.23	0.29	0.18	1.55	1.44	192	159
Oldham	20.0	18.8	0.04	...	0.62	0.83	0.27	0.23	0.19	0.12	0.44	0.29	0.12	0.04	0.77	1.19	170	146
Burnley	19.8	19.5	0.02	...	0.62	1.15	0.29	0.12	0.34	0.14	0.40	0.28	0.18	0.12	1.54	2.01	208	212
Blackburn	18.7	16.0	0.01	...	0.55	0.51	0.26	0.26	0.29	0.19	0.33	0.10	0.21	0.10	1.00	1.07	184	156
Preston	21.2	19.2	0.01	...	0.75	1.08	0.18	0.13	0.19	0.14	0.44	0.10	0.28	0.17	1.71	1.96	209	199
Halifax	16.8	14.9	0.01	...	0.33	0.50	0.15	0.07	0.15	0.39	0.21	0.06	0.16	0.04	0.34	0.30	140	115
Bradford	17.2	16.1	0.01	...	0.33	0.44	0.16	0.14	0.19	0.21	0.27	0.13	0.16	0.18	0.73	0.93	159	152
Leeds...	18.5	15.6	0.01	...	0.46	0.59	0.18	0.07	0.32	0.18	0.38	0.32	0.17	0.10	1.01	0.97	172	151
Sheffield	19.3	16.4	0.00	...	0.55	0.17	0.20	0.49	0.43	0.19	0.40	0.24	0.25	0.12	1.46	1.71	182	158
Hull...	18.3	16.9	0.08	0.04	0.53	0.24	0.13	0.05	0.52	0.52	0.37	0.28	0.19	0.19	1.50	1.61	170	160
Sunderland	20.6	18.6	0.01	...	0.58	0.10	0.18	0.04	0.13	0.22	0.44	0.39	0.30	0.14	1.09	1.08	167	140
South Shields	19.1	17.6	0.02	0.01	0.48	0.96	0.22	0.05	0.11	0.26	0.46	0.34	0.21	0.10	0.78	0.88	156	148
Gateshead	18.7	16.3	0.05	...	0.49	0.41	0.18	0.06	0.11	0.28	0.46	0.33	0.11	0.08	1.12	1.62	170	161
Newcastle-on-Tyne	20.4	17.1	0.01	...	0.40	0.63	0.13	0.06	0.16	0.24	0.43	0.22	0.11	0.05	0.74	1.03	167	151
Cardiff...	16.2	14.0	0.01	...	0.42	0.01	0.12	0.02	0.43	0.07	0.41	0.35	0.09	0.07	0.67	0.79	148	138
Rhondda	19.7	16.1	0.00	...	0.55	0.19	0.23	0.07	0.75	0.20	0.46	0.21	0.32	0.16	1.22	1.63	197	174

In this table 0.00 indicates that the deaths were too few to give a death-rate of 0.005; where no deaths occurred, ... is inserted.

TABLE V.
METEOROLOGICAL OBSERVATIONS, 1907.
(From the Borough Meteorologist's Report).

Month.	Baro- meter Corrected and Reduced to 32° Far. Mean sea level.	Readings of Thermometers					Elastic Force of the Aqueous Vapour.	Mean Amount of Humidity Saturation per 100°	Rain. Amount Collected.	Registered Sunshine in Hours	Mean amount of Ozone None — Maximum
		Highest	Lowest	Mean.	Range	Dew-point					
January ...	30'301	42'7	34'2	38'20	8'5	33'6	'198	83'0	2'296	h. m. 25-0	0'6
February..	29'989	41'5	31'2	39'49	10'0	32'1	'186	90'0	2'482	43-40	0'6
March ...	30'135	50'7	36'6	42'07	15'1	37'0	'223	84'4	3'872	101-25	0'7
April ...	29'767	51'4	39'0	44'16	12'4	37'3	'227	75'3	1'865	70-25	0'7
May ...	29'846	56'4	43'3	48'57	13'1	42'2	'269	75'7	4'381	99-40	0'6
June ...	29'784	73'0	40'6	51'25	12'1	47'0	'327	82'3	7'840	88-20	1'0
July ...	30'019	63'5	49'6	55'16	13'6	49'4	'358	77'3	3'774	109-50	0'2
August ...	29'927	62'3	49'9	55'14	11'9	50'1	'367	79'4	5'366	104-35	0'4
September.	30'128	64'2	47'0	55'43	15'3	48'9	'356	79'3	1'487	84-25	0'3
October ...	29'617	54'4	43'8	48'44	10'6	44'4	'298	88'0	4'033	34-35	0'2
November..	29'977	47'9	38'7	42'99	9'2	39'2	'239	88'8	3'573	25-35	0'2
December..	29'693	43'1	35'7	39'69	7'4	36'1	'271	89'0	4'591	3-10	0'3
Mean or Total }	29'932	53'1	41'3	46'72	11'6	41'4	'277	83'1	45'560	790-40	0'5
Yearly Averages, 1887-1907	29'940	53'3	41'6	46'85	11'8	39'7	'278	81'5	40'898	992-53	1'1

Infectious Diseases.

Notification.

1187 cases of ordinary infectious disease were notified in accordance with the Infectious Diseases (Notification) Act, 1889, and 195 cases of phthisis under the Bolton Corporation Act, 1905.

This is higher than the number for 1906, but below the average for the last ten years. The increase was entirely due to scarlet fever.

The cases consisted of:—Scarlet fever, 866; enteric fever, 135; diphtheria, 79; puerperal fever, 18; and erysipelas, 89. There were no cases of smallpox notified.

The case-rate varied from 2·9 in Heaton to 9·3 in Derby Ward.

The epidemic death-rate was 2·40, lower than the average for the last ten years, but higher than that for last year.

There were 30 deaths from scarlet fever, 26 from enteric fever, 66 from diarrhoea, 234 from measles, and 64 from whooping cough.

TABLE VI.
WEEKLY NOTIFICATION OF SCARLET, ENTERIC, AND
DIPHThERIA, 1907.

Week	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Scarlet Fever	Enteric Fever	Diphtheria and Memb. Group.	Scarlet Fever	Enteric Fever	Diphtheria and Memb. Group.	Scarlet Fever	Enteric Fever	Diphtheria and Memb. Group.	Scarlet Fever	Enteric Fever	Diphtheria and Memb. Group.
1	12	3	2	14	3	1	14	2	1	19	3	1
2	12	3	1	9	1	3	13	4	1	17	6	1
3	18	4	...	11	1	...	21	...	1	20	3	1
4	15	5	1	18	3	2	10	1	...	33	7	2
5	17	...	4	19	1	...	12	2	...	38	5	2
6	16	1	1	11	...	1	13	6	1	18	6	6
7	14	1	3	17	3	2	7	7	1	31	2	...
8	17	1	2	10	...	...	12	2	2	31	3	1
9	20	1	5	9	1	3	16	2	...	25	1	1
10	13	2	1	8	1	2	14	2	...	23	...	1
11	11	3	1	8	4	2	16	1	2	21	4	3
12	16	4	1	8	3	1	21	7	1	30	...	2
13	11	2	5	6	1	2	30	3	2	21	4	...
Total...	192	30	27	148	22	19	199	39	12	327	44	21

TABLE VII.

DISTRIBUTION OF NOTIFIED DISEASES IN WARDS, 1907.

WARDS	Small-pox	Scarlet Fever	Enteric Fever and Continued Fever	Diphtheria and Memb. Group	Puerperal Fever	Erysipelas	Total	Rates per 1000
West		118	15	17	1	10	161	5·7
Halliwell		117	13	7	4	3	144	6·1
Bradford		121	20	11	...	12	164	8·0
Derby		129	26	7	2	25	189	9·3
East... ..		39	11	2	3	6	61	6·1
Rumworth		43	4	...	1	2	50	5·4
Church		24	4	4	...	4	36	4·2
North		39	7	1	1	2	50	6·4
Exchange		16	...	3	2	4	25	5·2
Old Borough		646	100	52	14	68	880	6·6
Great Lever		40	13	5	...	5	63	5·5
Tonge		52	8	3	...	4	67	6·2
Astley Bridge		14	2	7	1	5	29	3·3
Smithills		43	1	2	...	...	46	8·3
Hulton		34	5	2	1	4	46	8·6
Darcy Lever-c-Brightmet..		15	1	2	1	2	21	6·0
Deane-cum-Lostock		18	4	5	1	1	29	8·9
Heaton		4	1	1	...	...	6	2·9
Added Area		220	35	27	4	21	307	6·0
Extended Borough		866	135	79	18	89	1187	6·4

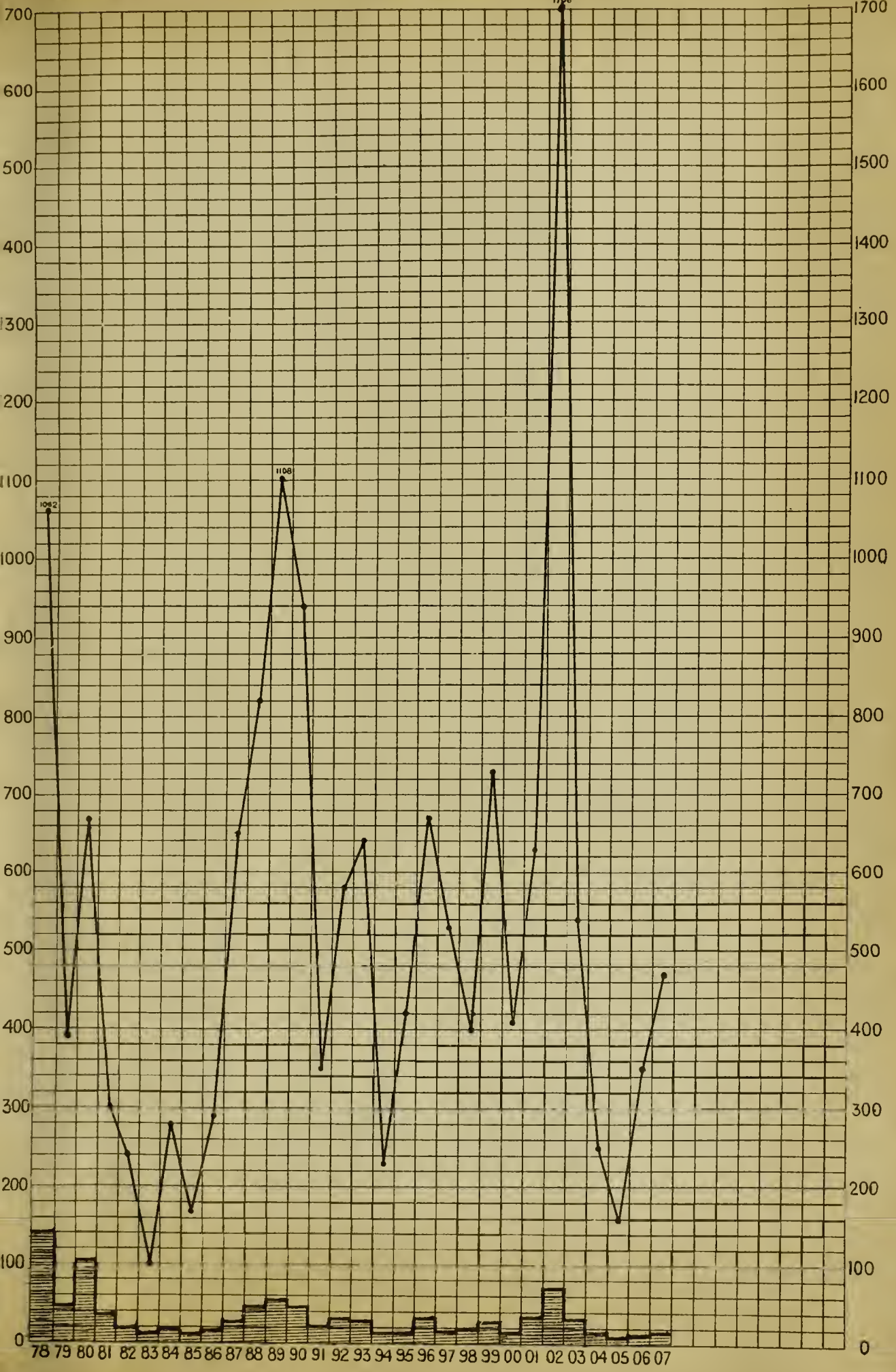
TABLE VIII.
INFECTIOUS DISEASES NOTIFIED FROM 1880 TO 1907.

Year	Smallpox	Scarlet	Diphtheria, Memb. Croup	Enteric	Continued	Typhus	Puerperal	Cholera	Erysipelas	Relapsing	Total	Rate per 1000 of population	Total admitted to Hospital
1880...	18	702	5	102	13	17	3	...	...	...	860	8.0	...
1881...	9	320	5	98	1	24	10	2	...	...	469	4.4	...
1882...	267	259	19	77	...	30	3	...	...	...	655	6.1	...
1883...	3	193	9	75	4	9	3	1	...	...	207	1.9	...
†1884...	13	303	11	152	1	6	3	4	...	...	493	4.5	62
1885...	6	186	8	57	...	...	4	...	...	...	261	2.3	120
1886...	...	322	18	60	...	3	3	...	...	...	406	3.6	208
1887...	...	721	22	107	...	2	1	...	...	...	853	7.5	296
1888...	11	924	51	180	...	2	4	...	...	...	1172	10.3	289
1889...	4	1256	92	125	2	16	...	...	...	...	1495	13.0	309
1890...	...	1071	74	101	1	15	4	...	...	...	1266	10.9	273
1891...	...	411	93	145	...	16	5	...	...	...	670	5.8	113
1892...	1	683	112	97	1	2	8	1	...	...	905	7.7	158
1893...	44	747	123	170	...	2	4	...	...	...	1090	9.2	202
1894...	2	267	25	117	1	...	16	...	...	...	428	3.6	136
1895...	10	495	34	237	1	...	7	...	...	...	784	6.5	168
1896...	1	816	29	186	...	...	10	...	...	...	1042	8.6	293
1897...	...	645	17	125	...	...	8	...	...	...	795	6.5	261
1898...	...	487	27	208	...	...	2	...	...	...	724	5.9	316
*1899...	...	1226	52	321	...	...	12	...	...	...	1611	9.9	567
1900...	1	644	56	208	...	...	9	...	13	1	932	5.6	482
1901...	...	1066	91	219	...	...	8	...	28	...	1412	8.3	639
1902...	63	2910	202	192	4	...	14	...	71	...	3456	20.2	1266
1903...	55	971	142	178	2	...	15	...	85	...	1448	8.3	619
1904...	19	477	150	158	2	...	9	...	69	...	884	5.0	347
1905...	2	292	103	164	1	...	5	...	78	...	645	3.6	261
1906...	...	630	84	197	...	...	9	...	123	...	1043	5.7	472
1897 } to } 1906 }	14.0	934.8	92.4	197.0	.9	...	9.1	...	46.7	.1	1295.0	7.9	523.0
1907...	...	866	79	135	...	...	18	...	89	...	1187	6.4	627

† Isolation Hospital Established.

* Borough Extended.

Cases and Deaths from Scarlet Fever per 100,000 inhabitants.



Enteric Fever.

135 cases were notified, this number including also those called continued fever; this is a great decrease on those for 1906, and the lowest rate per 1000 since 1886. There were 26 deaths, making a death-rate of '14 per 1000, which is also the lowest since 1886. The death-rate in the 76 great towns was '06.

The incidence on the different forms of closets was for 1907:—

1 case in every 349	privy-ashpits.
1 „ „ 286	pails.
1 „ „ 214	waste-water closets.
1 „ „ 1002	fresh-water closets.

13 houses out of the 107 infected had more than one case, one had 7 cases, one 6 cases, two had 4 cases, two had 3 cases each, and seven had 2 cases each.

Of the 26 deaths, 10 occurred in houses provided with the old-fashioned closets (privy-ashpits and pails), and 15 in houses connected with waste-water closets, and one with fresh-water closet.

The incidence on the different forms of closets for the years 1903—1907 was:—

1 case in every 213	privy-ashpits.
1 „ „ 211	pails.
1 „ „ 322	waste-water closets.
1 „ „ 621	fresh-water closets.

Deaths in Wards:—

West	...	...	...	3	Great Lever	...	...	...	2
Halliwell	...	...	...	1	Tonge	...	...	...	—
Bradford	...	...	...	5	Astley Bridge	...	...	...	—
Derby	...	...	...	5	Smithills	...	...	...	2
East	...	...	...	3	Hulton	...	...	...	—
Runworth	...	...	...	—	Darcy Lever-cum-Brightmet.	...	...	...	—
Church	...	...	...	—	Deane-cum-Lostock	...	...	...	3
North	...	...	...	2	Heaton	...	...	...	—
Exchange	...	...	...	—		

TABLE IX.
 CASES OF ENTERIC FEVER REPORTED IN EACH MONTH DURING
 THE LAST FIVE YEARS COMPARED WITH 1907,

Month	1902	1903	1904	1905	1906	Average	1907
January ...	15	13	9	22	19	15.6	15
February ...	21	12	10	12	13	13.6	4
March ...	15	7	5	15	13	11.0	11
April ...	14	8	11	6	15	10.8	8
May ...	10	4	6	8	15	8.6	4
June... ...	7	10	6	3	9	7.0	10
July ...	12	7	7	11	5	8.4	8
August ...	8	27	18	11	10	14.8	18
September ...	25	30	14	19	16	20.8	13
October ...	30	23	29	19	24	25.0	21
November ...	19	21	21	17	33	22.2	15
December ...	16	16	22	21	25	20.0	8
Total ...	192	178	158	164	197	177.8	135

Enteric Fever.—Cases and Deaths per 100,000 inhabitants.

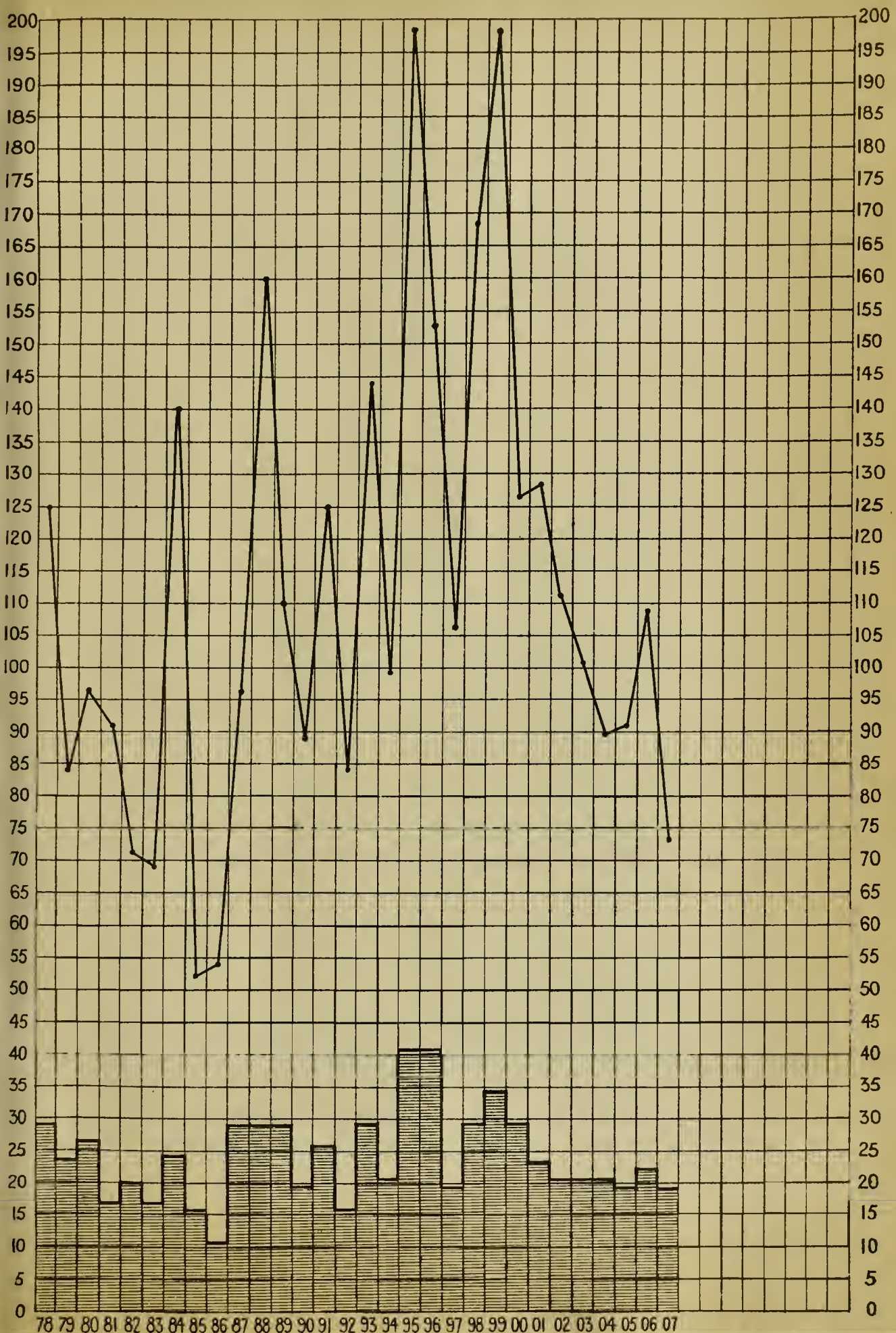


TABLE X.

ENTERIC FEVER IN BOLTON, 1882-1907.

Year	Cases	Case-rate per 1,000 of Population	Deaths	Death-rate per 1,000 of Population	Death-rate per cent. of cases.
1882	77	'72	17	'15	22'0
1883	75	'69	17	'15	22'6
1884	152	1'39	26	'23	17'1
1885	57	'51	17	'15	29'8
1886	60	'53	12	'10	20'0
1887	107	'95	31	'27	28'9
1888	186	1'58	31	'27	17'2
1889	125	1'09	31	'27	24'8
1890	102	'88	22	'18	21'5
Av. 1881-90	103	'92	22	'19	22'3
1891	145	1'24	30	'26	20'6
1892	97	'83	19	'16	17'5
1893	170	1'44	34	'28	20'0
1894	117	'98	25	'20	21'3
1895	237	1'98	50	'41	21'0
Av. 1891-95	153	1'29	31	'26	20'4
1896	186	1'54	50	'41	26'8
1897	125	1'02	24	'20	19'2
1898	208	1'69	35	'28	16'8
1899	321	1'97	55	'33	17'1
1900	208	1'26	47	'28	22'5
Av. 1896-1900	209	1'51	42	'25	20'1
1901	219	1'29	39	'23	17'8
1902	192	1'12	36	'21	18'8
1903	178	1'02	36	'20	20'2
1904	158	'89	37	'21	23'4
1905	164	'92	34	'19	20'7
Av. 1901-05	182	1'04	36	'20	20'1
1906	197	1'09	40	'22	20'3
1907	135	'73	26	'14	19'2

Diphtheria and Membranous Croup.

79 cases were notified in 76 houses, with 20 deaths, equal to a death-rate of 25 per cent. of cases, or '10 per 1000 of the population. The number of cases is smaller than in 1906, and the death-rate is slightly lower and still compares very favourably with that for the 76 great towns, which was '17, and is lower than the ten years' average for Bolton.

Of those notified only 40 were children attending school, and 20 contacts of school children. 37 schools out of the 63 were affected; 21 had cases only, 5 had cases and contacts, and 11 contacts only. The highest number of cases in any one school was three, and the highest number of contacts two.

The age distribution was:—

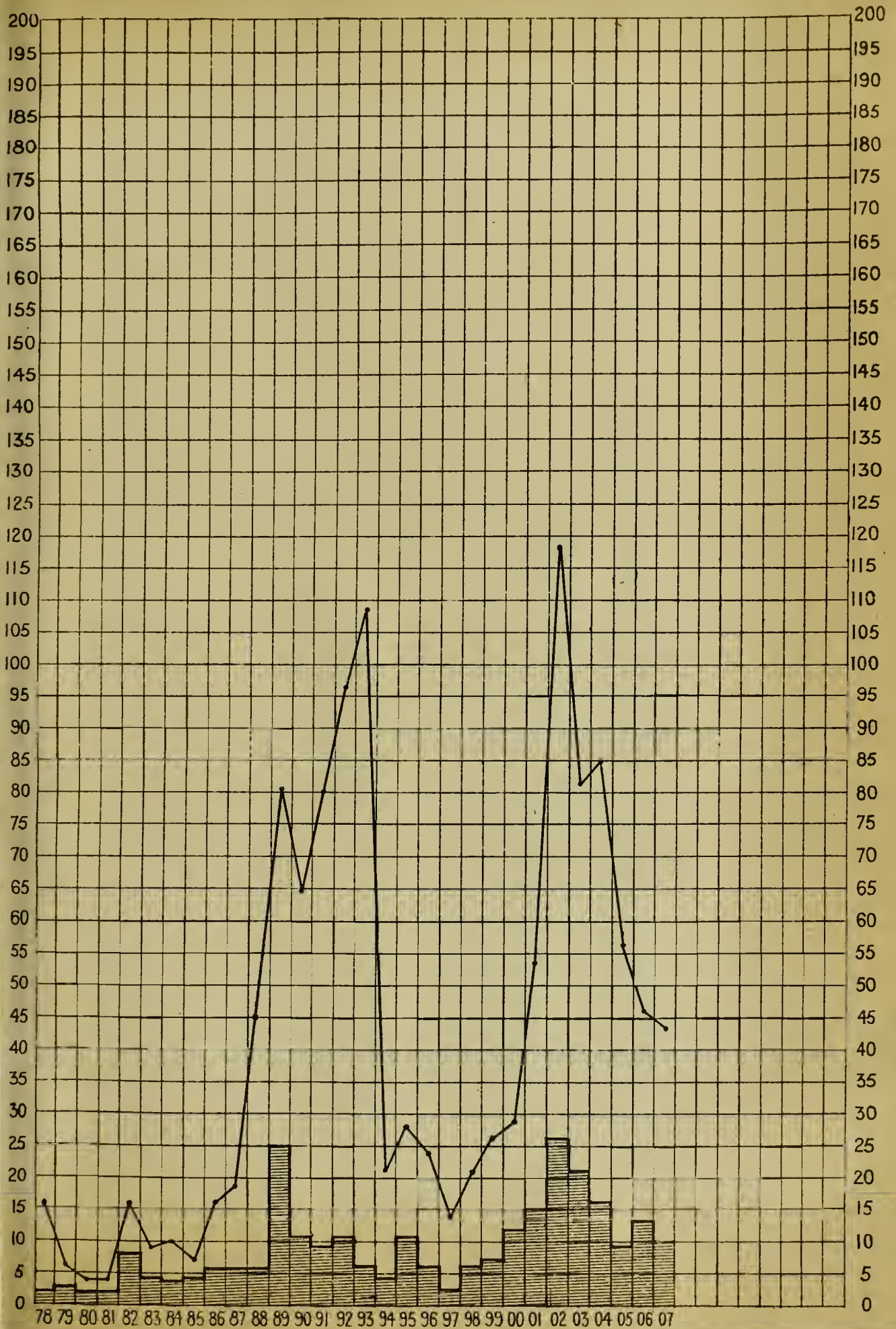
Age.	Number.	Deaths.
0—1	5	3
1—2	3	2
2—3	5	2
3—4	6	4
4—5	7	—
5—10	30	7
10—15	8	—
15 and upwards	15	2

The death-rates in the 33 great towns were:—

Leicester	·06	Manchester	·16
Preston	·10	Bristol	·17
Brighton	·11	Southampton	·17
Bolton	·11	Birmingham	·18
Oldham	·12	Newcastle-on-Tyne	·19
Blackburn	·12	Birkenhead	·20
Cardiff	·12	West Ham	·24
Sheffield	·12	Hull	·25
Plymouth	·12	Gateshead	·25
Burnley	·13	Halifax	·26
Leeds	·13	Croydon	·26
Liverpool	·14	Sunderland	·27
Rhondda	·14	Portsmouth	·29
Nottingham	·15	Salford	·30
Bradford	·15	Norwich	·37
South Shields	·15	Derby	·42
London	·16		

170,000 units of antitoxin were supplied on application for 38 cases to 19 medical practitioners in bulbs of 4000 and 2000 units.

Case-rates and Death-rates per 100,000, for Diphtheria, in previous years.



Diarrhœa.

66 deaths were recorded, equal to a death-rate of '36 per 1000 inhabitants, less than the ten years' average, and less than that of the 76 great towns, which was '39.

The weekly number of deaths and the four feet earth temperature during the period of prevalence were:—

Week Ending.				Deaths.		4 Feet Temperature.	
July	20	...	...	1	...	...	53·8
„	27	...	...	3	...	...	54·6
Aug.	3	...	...	1	...	...	55·1
„	10	...	...	1	...	...	55·1
„	17	...	...	1	...	...	55·3
„	24	...	...	1	...	...	55·2
„	31	...	...	2	...	...	54·6
Sept.	7	...	..	—	...	...	54·0
„	14	...	...	3	...	...	53·7
„	21	...	...	2	...	...	54·0
„	28	...	...	3	...	...	54·1
Oct.	5	...	...	9	...	...	53·9
„	12	...	...	9	...	...	53·2
„	19	...	...	6	...	...	51·9
„	26	...	...	4	...	...	50·8
Nov.	2	...	...	2	...	...	49·5
„	9	...	...	1	...	...	48·9
„	16	...	...	2	...	...	48·4

The deaths distribution in wards, works out thus:—

West	...	...	...	13	Great Lever	...	...	...	2
Halliwell	...	...	...	2	Tonge	...	...	...	2
Bradford	...	...	...	9	Astley Bridge	...	...	...	2
Derby	...	...	...	10	Smithills	...	...	...	1
East	...	...	...	5	Hulton	...	...	...	3
Runworth	...	...	...	6	Darcy Lever-cum-Brightmet.	...	...	...	1
Church	...	...	...	1	Deane-cum-Lostock	...	...	...	—
North	...	...	...	2	Heaton	...	...	...	1
Exchange	..	...	...	6					

SUMMARY OF FACTS CONCERNING DIARRHŒA DEATHS OF CHILDREN
NOT ABOVE 2 YEARS OF AGE.

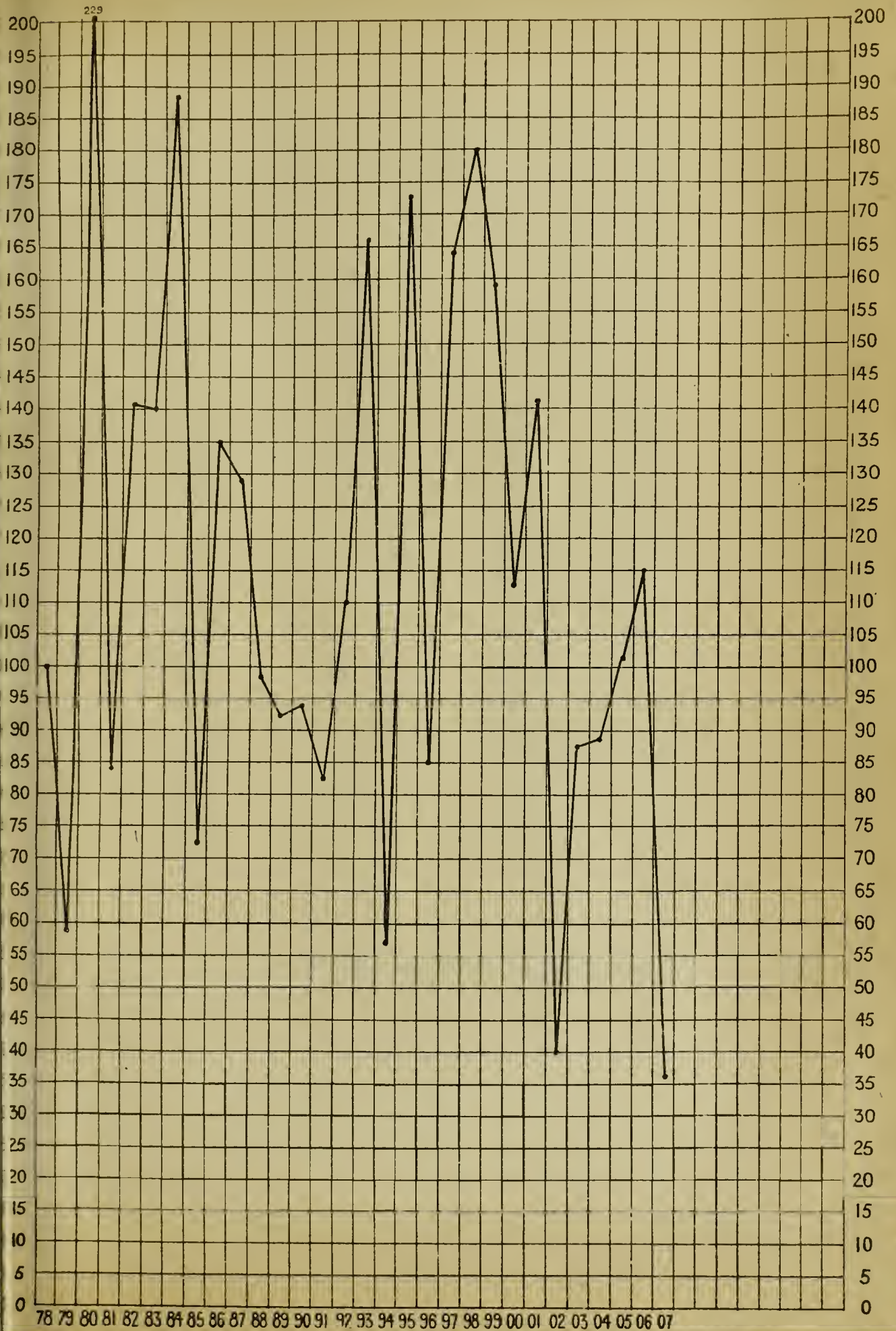
Form of Food	Total	Under One Week	1-4 W'ks	1-2 M'ths	2-4 M'ths	4-6 M'ths	6-12 M'ths	Over 1 and under 2 Years.
Breast Fed only	7	...	...	...	2	2	2	1
Cows' Milk only	13	...	1	3	2	1	5	1
Condensed Milk	2	...	...	...	1	...	1	...
Patent foods with some } of the above ... }	29	...	...	3	4	6	11	5
	51	...	1	6	9	9	19	7

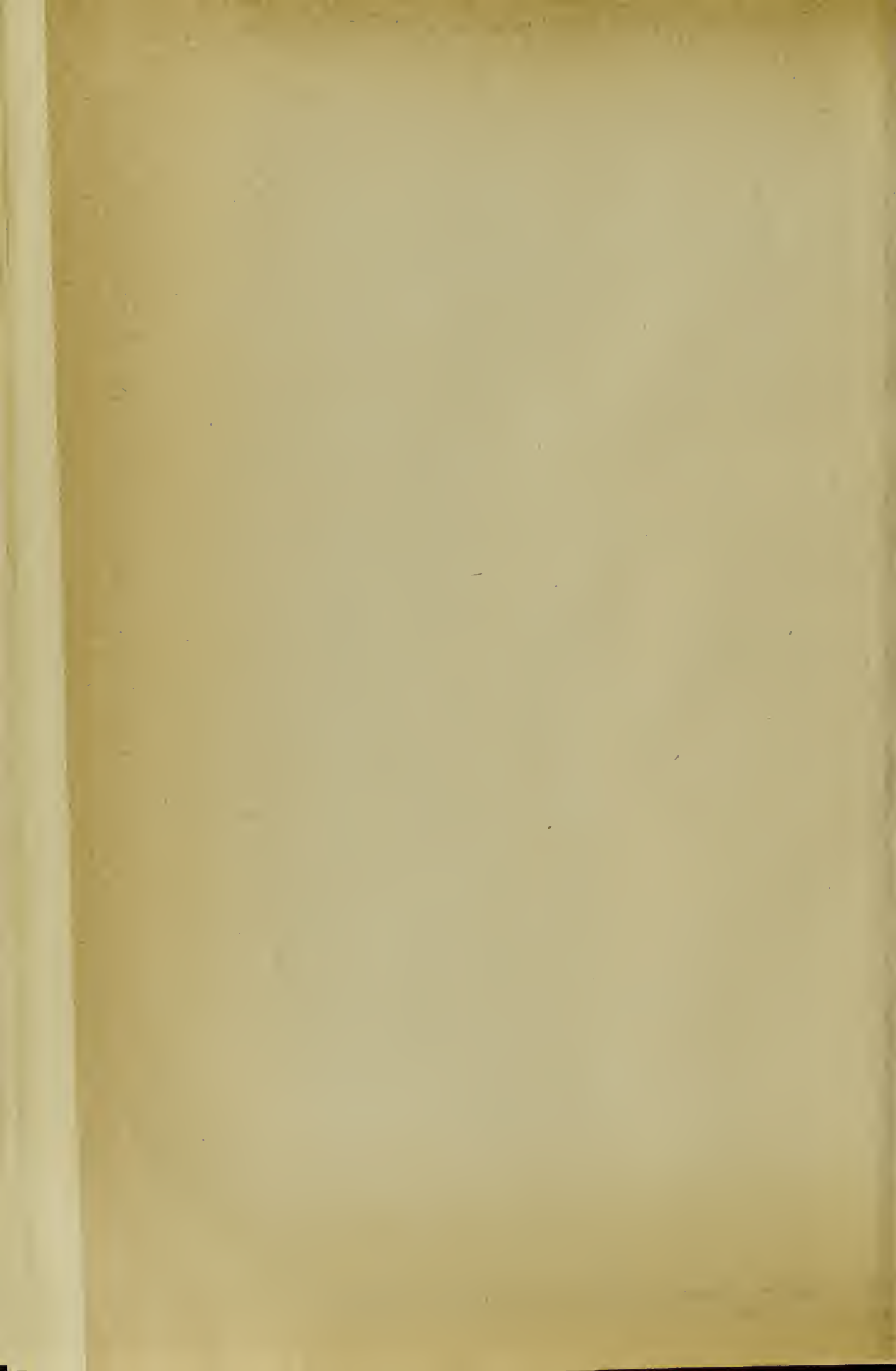
Reported by mothers as delicate children 22
 Number of mothers working away from home 0
 Insanitary conditions in houses other than closet nuisances ... 7

Closet accommodation in houses visited:—

(a) Privy-middens 27
 (b) Pails 9
 (c) Waste-water closets 12
 (d) Fresh-water closets 3

Diarrhœa.—Deaths in previous years per 100,000 inhabitants.





Measles.

During the year 1907 there were registered in the Borough 234 deaths from measles and complications following it. This number is much in excess of those registered during each of the previous five years, but not so many in proportion to the population as were registered during the years 1897, 1893, 1889 and 1886. A comparison with previous years shews that this disease assumes an epidemic form in alternate years, that every four or five years the epidemic is severe, and that the 1907 epidemic is the first severe one since 1897. The average measles death-rate for the nine years 1899—1907 was .39 per 1000 of the population, and for the ten years 1888—1897 was .77. It must be remembered, however, that the Old Borough was extended in 1899, and that there was added to this denser part, a large area with a much smaller density of population, called in this report the "Added Area." The measles death-rate in the Old Borough for ten years 1898—1907 was .47, still considerably less than for the previous ten years.

TABLE XI.

DEATHS AND DEATH-RATES IN EXTENDED BOROUGH, OLD BOROUGH,
AND ADDED AREA, 1899—1907.

Date	Number of Deaths			Death-rates		
	Extended Borough	Old Borough	Added Area	Extended Borough	Old Borough	Added Area
1886	...	137	...	...	1'23	...
1887	...	91	...	...	'80	...
1888	...	34	...	...	'29	...
1889	...	160	...	...	1'39	...
1890	...	97	...	...	'83	...
1891	...	55	...	...	'47	...
1892	...	43	...	...	'36	...
1893	...	162	...	...	1'38	...
1894	...	20	...	...	16	...
1895	...	120	...	...	1'00	...
1896	...	6	...	...	'04	...
1897	...	216	...	...	1'77	...
1898	...	31	...	...	'25	...
1899	94	87	7	'57	'70	'18
1900	37	31	6	'22	'24	'15
1901	108	98	10	'64	'77	'23
1902	31	26	5	'18	'20	'11
1903	49	44	5	'28	'34	'10
1904	16	11	5	'09	'08	'10
1905	91	68	23	'51	'52	'47
1906	2	2	...	'01	'01	...
1907	234	211	23	1'27	1'59	'45

The fluctuations above mentioned and shewn in the tables are characteristic of measles in large and densely populated towns. The average death-rates from measles in 33 large towns during 1896—1905 taken from the Registrar General's Report are given below, and it is seen that the highest rates obtain in the Lancashire towns, and that Bolton's rate was the lowest of these.

MEASLES DEATH-RATES 1896—1905 IN 33 LARGE TOWNS.

Croydon	...	...	·24	(L)	Bolton	...	...	·46
Brighton	...	...	·28		Leeds	...	...	·46
Derby	...	...	·30		Plymouth	...	...	·46
Huddersfield	...	...	·32	(L)	Liverpool	...	...	·47
Leicester	...	...	·33		Bristol	...	...	·47
Wolverhampton	...	...	·33		Gateshead	...	...	·49
Halifax	...	...	·33		London	...	...	·51
Bradford	...	...	·33		Hull	...	...	·53
Portsmouth	...	...	·36		West Ham	...	...	·54
Swansea	...	...	·40		Sheffield	...	...	·55
Newcastle	...	...	·40	(L)	Blackburn	...	...	·55
Cardiff	...	...	·42		Sunderland	...	...	·58
Norwich	...	...	·43	(L)	Burnley	...	...	·62
Nottingham	...	...	·43	(L)	Oldham	...	...	·62
Birkenhead	...	...	·44	(L)	Manchester	...	...	·73
Birmingham	...	...	·45	(L)	Preston	...	...	·75
				(L)	Salford	...	...	·84

During the year 1906, Bolton was remarkably free from measles, only two deaths being recorded. Towards the end of the year it was prevalent in districts adjoining the north and west of Bolton. During the month of January, 1907, there were only four deaths recorded. In the month of February two infants' schools were closed, one in the northern and one in the western part of the Borough, and five deaths from the disease were registered. From these two centres apparently the disease spread through the centre of the town to the southern and eastern districts. The progress of the epidemic is fairly well indicated by following the dates of the closure of the schools and the number of deaths recorded in the calendar months.

Month.	Deaths.	No. of Schools closed.
January	6	—
February	7	7
March	35	—
April	44	10
May	91	6
June	33	6
July	12	—
August	5	—

29 schools were closed, each for a period of three weeks; of these 24 were infants' departments only and five infants' and mixed departments.

The ventilation in eight of these was found defective.

Judging from the weekly deaths reported and the information received from school teachers, the disease was epidemic from the middle of March to the middle of June, this being the period of the year when the greatest prevalence was shewn in previous years.

TABLE XII.

MONTHLY DEATHS FROM MEASLES, 1895—1907.

Month	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	Average 1895—1907
January	8	1	3	...	12	4	9	1	6	...	7	...	6	4
February	12	...	23	...	17	2	11	2	2	1	8	...	7	6
March	22	...	55	...	12	...	13	2	10	1	27	1	35	11
April	27	..	66	1	22	2	17	1	4	2	24	1	44	16
May	30	1	31	1	11	6	14	1	10	...	12	...	91	9
June...	14	2	30	2	11	8	33	2	7	...	10	...	33	11
July ...	2	...	8	...	2	2	6	...	3	2	2	...	12	3
August	3	1	...	1	...	5	5	1	2	...	1	...	5	2
September	2	...	...	...	1	2	...	2	1	...	...	...	1	1
October	...	...	...	2	...	...	1	3	1	3	...	...	...	1
November	...	1	...	1	3	1	..	5	2	1	...	...	...	1
December	...	...	...	23	3	5	...	9	1	6	...	...	...	3
Totals	120	6	216	31	94	37	108	29	49	16	91	2	234	79

The influence of density in the measles death-rate is shewn in the following tables, which give the population of the different Wards, measles, and death-rates. Roughly speaking, the death-rate for 1907 in the Old Borough was four times that of the Added Area. This is not to be wondered at when we remember that the houses in the centre of the town are not only crowded together, but that there are still remaining many back-to-back and single houses without through ventilation, where there is no proper yard accommodation, and where closets of an insanitary type are still used in common by more than one house. Other diseases are also prevalent in these insanitary neighbourhoods.

DEATHS FROM MEASLES, 1907.

Wards.	Population.	Death-rate.	No. of Deaths.
Old Borough :—			
West	27,960	—	43
Halliwell	23,580	—	25
Bradford	20,430	—	49
Derby	20,320	—	37
East	9,940	—	19
Rumworth	9,205	—	12
Church	8,534	—	11
North	7,810	—	8
Exchange	4,770	—	7
Total	132,549	1·59	211
Added Area :—			
Great Lever	11,428	—	6
Tonge	10,755	—	10
Astley Bridge	8,540	—	1
Smithills	5,522	—	0
Hulton	5,330	—	2
Darcy Lever-cum-Brightmet..	3,475	—	1
Deane-cum-Lostock	3,255	—	2
Heaton	2,063	—	1
Total	50,368	·45	23
Grand Total	182,917	1·27	234

TABLE XIII.

DEATHS FROM MEASLES IN WARDS, 1900-1907.

Wards in order of population	No. of Persons per Acre 1906	No. of Deaths.									Total 1900-1907	Average Death-rates 1900-1907
		1900	1901	1902	1903	1904	1905	1906	1907			
West	62	2	10	1	7	2	5	...	43	70	'31	
Halliwell	64	4	9	5	9	1	8	1	25	62	'36	
Bradford	71	2	22	7	7	2	38	1	49	128	'80	
Derby	67	1	22	3	11	...	8	...	37	82	'52	
East	63	17	7	3	4	...	4	...	19	54	'64	
Rumworth	54	1	7	2	2	..	4	...	12	28	'44	
Church	22	1	7	1	...	2	...	...	11	22	'29
North	51	3	9	1	3	3	...	...	8	27	'44
Exchange	47	...	5	3	1	1	1	...	7	13	'40	
Old Borough	56	31	98	26	44	11	68	2	211	491	'47	
Great Lever	13	2	3	1	1	2	9	...	6	24	'30	
Tonge	13	...	5	3	...	2	3	...	10	23	'30	
Astley Bridge	5	2	2	...	1	...	...	...	1	6	'09
Smithills	3	...	...	1	1	...	...	...	...	2	'05
Hulton	3	2	...	..	1	...	5	...	2	10	'25
Darcy Lever-c-Breightmet..	3	...	...	...	...	1	4	...	1	6	'21
Deane-cum-Lostock	1	...	...	...	...	...	2	...	2	4	'15
Heaton	1	..	...	...	1	...	...	...	1	2	'13
Added Area	4	6	10	5	5	5	23	...	23	77	'21	
Extended Borough	12	37	108	31	49	16	91	2	234	563	'40	

Of the 234 deaths 133 were those of males and 101 of females. 160 of these had respiratory complications, 59 other complications, and 15 were without complications. The age incidence is given below :

Under 1	...	...	...	...	64
1 to 2	...	...	...	...	92
2 to 3	...	...	...	...	43
3 to 4	...	...	...	...	12
4 to 5	...	...	...	...	10
5 to 6	...	...	...	...	9
6 to 10	...	...	...	...	3
Above 10	...	...	...	...	1

It will be seen, therefore, that 221 out of 234, or 94 per cent., were children under 5; 230 out of 234, or 98 per cent., were children under 6 years of age, and that there was only one death above ten years. At the same time, it should be remembered that 96 per cent. of whooping cough deaths, 53 per cent. of diphtheria deaths, and 65 per cent. of scarlet fever deaths are those of children under five years of age. The number of deaths in Bolton from the six chief epidemic diseases during the ten years 1897—1906 were :—

Diarrhœa	...	...	...	...	1872
Measles	...	...	...	...	675
Whooping Cough	...	...	...	...	486
Enteric Fever	...	...	...	...	389
Scarlet Fever	...	...	...	...	269
Diphtheria	...	...	...	...	226

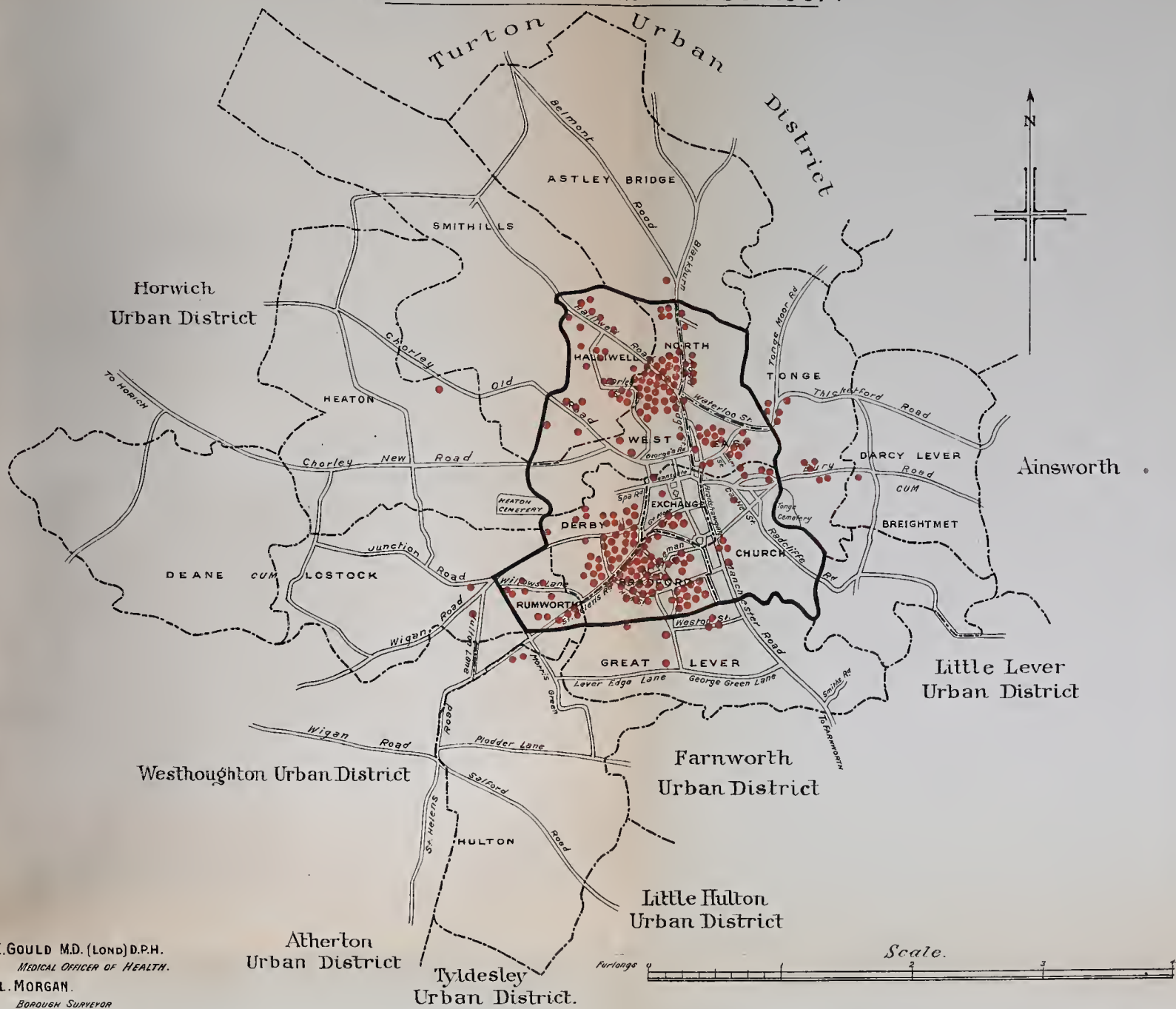
The measures adopted to prevent the spread of the disease were, the circulation of instructions to teachers with regard to infectious diseases, the closing of schools as soon as information was received that the attendance was seriously affected, the disinfection and cleansing of schools after closure, and the disinfection of houses in special cases.

Notification of measles is not compulsory in Bolton, nor is there sufficient accommodation at the Borough Hospitals for its isolation. It would be a costly undertaking, and house-to-house visitation would require a much larger staff than we have at present.

Measles, as will be seen from the above report, is the cause of a great amount of sickness and much mortality. It affects children

COUNTY BOROUGH OF BOLTON

MEASLES DEATHS IN WARDS. 1907.



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 BOROUGH SURVEYOR

chiefly under five years of age, it is most fatal in the second year of life, and the attack incidence is greatest in the third, fourth and fifth years. It is a rapidly spreading disease, and is probably always acquired by inhalation.

It is difficult to diagnose in its early stages before the rash appears, and children are often sent to school in an infected state. It only spreads in classes under five years of age, and there is rarely any need to close the boys' and girls' departments.

Density of population and overcrowding in houses, especially those without through ventilation, diminish greatly the chances of recovery and increase the liability to attack.

The general public shew little interest in sanitary matters, the poorer classes are ignorant and neglectful of preventive measures, looking upon measles as a trifling disease and one which all children are bound to contract. Notification and isolation would be costly and of doubtful benefit, even if we could secure the intelligent co-operation of parents.

While children under five, therefore, are not excluded from school, it would seem that the most effective measure that could be taken would be the closure of the whole of the infants' departments for a period of not less than three months as soon as an epidemic was threatening.

Phthisis (Pulmonary Tuberculosis).

Voluntary notification of this disease was adopted by the Bolton Corporation on 7th July, 1902, and compulsory notification came into force under Section 52 of the Bolton Corporation Act, 1905, on 9th October, 1905.

The notifications up-to-date have been as follows:—

Year.	No. Notified.
1902 (part)	80
1903	92
1904	93
1905 (part compulsory from 9th October) ...	150
1906 (first complete year compulsory) ...	262
1907	195

Inspection is made of the houses, information is obtained of the history of the disease, pamphlets are distributed, and cleansing and disinfection are done by the Corporation.

Sanatorium treatment is offered free to suitable cases who cannot afford to pay.

The occupations of those notified as suffering were as follows:—

Cotton Spinning	22
Cotton Weaving	12
Bleaching and Printing	2
Metals, Machines and Implements	18
Coal Mining	6
Building Construction	1
Conveyance of Men and Goods	11
General Labourers	18
Food, Drink and Tobacco	2
Dress, etc.	8
Commercial or Business Clerks	2
Miscellaneous Trades	23
Domestic Service	2
Household Work	39
School Children	12
Teachers	4
No Occupation or Occupation Unkuown ...	13

Only 13 cases out of 208 were notified twice, i.e., 6.2 per cent.

During the period of notification, 1902—1907, in 24 houses two cases have occurred, and in one house three cases.

Sanatorium treatment was commenced on July 20th, 1906, and has been continued during 1907. The Sanitary Committee, having found that four beds were not sufficient for their needs, obtained the permission of the Council to contract for four more, making eight in all.

The conditions imposed by the Meathop Sanatorium Committee being:—(1) That the cases sent be not advanced and hopeless, and if such are sent they reserve the right to discharge them; (2) That the cases be sent of that sex which they can accommodate at the time!

The following are the summarised results of the treatment of those admitted and discharged from July, 1906, up to the end of 1907. The stages of the disease are those adopted by the Meathop Sanatorium Authorities, and the reports are those sent from the Medical Superintendent of that Institution. "A" means slight consumption; "B" moderate; "C" advanced; "D" hopeless; "E" absolutely hopeless. One patient in Class "B," and another in Class "C," left the Institution at their own request in order to go to work.

ADMISSIONS TO MEATHOP SANATORIUM.

Stage of Disease	Number	Cured	Improved and fit for Light Work	Improved in General Health but not fit for Light Work	No Improvement
A	2	2	...	...	...
B	3	1	2	...	...
C	9	...	2	3	4
D	...	...	...	...	...
E	1	...	...	...	1
Total	15	3	4	3	5

During 1907 the deaths registered from the disease numbered only 186, the lowest recorded since the extension of the Borough in 1899, and the lowest death-rate recorded in the history of the Borough, being 1·01 per 1000 inhabitants. In the year 1879 a death-rate of 1·96 was recorded. The death-rate during the year 1906 for England and Water was 1·15, and 1·39 in London during 1907.

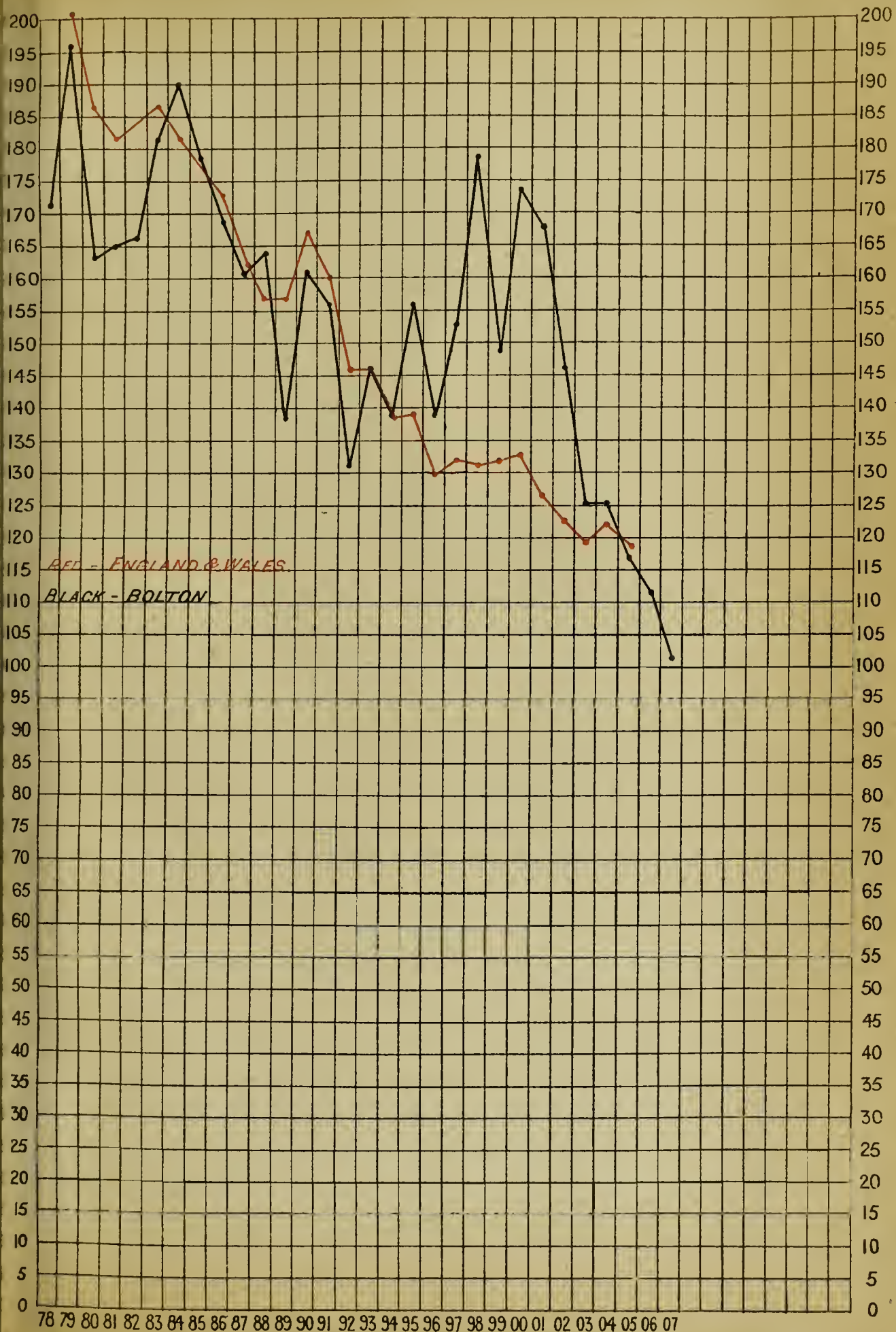
The occupations of those who died were as follows:—

Cotton Spinning	...	...	...	...	24
Cotton Weaving	...	...	...	...	6
Bleaching and Printing	...	...	...	...	5
Metals, Machines and Implements	...	...	...	...	22
Coal Mining	...	...	...	...	5
Building Construction	...	...	...	...	3
Conveyance of Men and Goods	...	...	...	...	9
General Labourers	...	...	...	...	20
Food, Drink and Tobacco	...	...	...	...	4
Dress, etc.	...	...	...	...	4
Commercial or Business Clerks	...	...	...	...	2
Miscellaneous Trades	...	...	...	...	18
Domestic Service	...	...	...	...	7
Household Work	...	...	...	...	36
School Children	...	...	...	...	5
Teachers	...	...	...	...	1
No Occupation or Occupation Unknown	...	...	...	...	15

The age and sex distribution are shewn here:—

SEX	Total	A G E S							
		Under 5	5-15	15-25	25-35	35-45	45-55	55-65	65 and upwards
Male...	104	2	2	11	17	31	25	11	5
Female	82	...	5	13	22	18	15	7	2
Totals	186	2	7	24	39	49	40	18	7

Phthisis.—Deaths per 100,000 inhabitants in previous years.



It is possible that owing to the better means of diagnosis, diseases formerly diagnosed as phthisis are now classified under other forms of respiratory disease. I therefore give the statistics for the last eight years for comparison:—

DEATH-RATES PER 1000 OF POPULATION.

Year.	Other Tubercular			Respiratory.	Total.
	Phthisis.	Diseases.			
1900	1·74	·48	4·12	6·34	
1901	1·68	·24	3·77	5·69	
1902	1·47	·32	3·51	5·30	
1903	1·25	·53	3·54	5·32	
1904	1·25	·50	3·34	5·09	
1905	1·17	·39	2·79	4·35	
1906	1·11	·55	2·72	4·38	
1907	1·01	·38	3·26	4·65	

TUBERCULOSIS DEATH-RATES IN 38 GREAT TOWNS DURING 1906.

	Tuberculosis:		Other Tubercular	
	All Forms.	Phthisis.	Diseases.	
Northampton	... 1·20	... ·87	... ·33	
Wolverhampton	... 1·25	... ·79	... ·46	
Portsmouth	... 1·33	... 1·00	... ·33	
Derby	... 1·36	... ·91	... ·45	
Sheffield	... 1·47	... 1·01	... ·46	
Bristol	... 1·48	... 1·11	... ·37	
(L) Blackburn	... 1·50	... ·92	... ·58	
Halifax	... 1·51	... 1·12	... ·39	
Croydon	... 1·54	... 1·14	... ·40	
Hull	... 1·55	... 1·09	... ·46	
Birmingham	... 1·60	... 1·22	... ·38	
Nottingham	... 1·61	... 1·23	... ·38	
Middlesborough	... 1·63	... 1·10	... ·53	
Huddersfield	... 1·65	... 1·25	... ·40	
(L) Bolton	... 1·66	... 1·11	... ·55	
Bradford	... 1·71	... 1·30	... ·41	
Birkenhead	... 1·72	... 1·36	... ·36	
Cardiff	... 1·76	... 1·24	... ·52	
West Ham	... 1·80	... 1·14	... ·66	
Plymouth	... 1·83	... 1·33	... ·50	
(L) Oldham	... 1·83	... 1·34	... ·49	
Stockport	... 1·85	... 1·25	... ·60	
Leicester	... 1·85	... 1·46	... ·39	
Leeds	... 1·89	... 1·23	... ·66	
(L) Burnley	... 1·89	... 1·36	... ·53	
(L) Preston	... 1·90	... 1·04	... ·86	
Brighton	... 2·00	... 1·42	... ·58	
London	... 2·02	... 1·47	... ·55	
(L) St. Helens	... 2·05	... 1·21	... ·84	
(L) Liverpool	... 2·08	... 1·58	... ·50	
Swansea	... 2·11	... 1·47	... ·64	
Sunderland	... 2·14	... 1·52	... ·62	
South Shields	... 2·16	... 1·48	... ·68	
Newcastle-on-Tyne	... 2·20	... 1·49	... ·71	
(L) Warrington	... 2·23	... 1·55	... ·68	
(L) Salford	... 2·27	... 1·67	... ·60	
(L) Manchester	... 2·34	... 1·71	... ·63	
Norwich	... 2·43	... 1·64	... ·79	

Bacteriological Examination.

The following specimens were sent to the Public Health Laboratory, Owens College, Manchester, during the year for examination, and with the results as tabulated.

Specimen.	Positive Result.	Negative Result.	Total.
Blood from Enteric Fever ...	3	33	36
Sputum of Phthisis ...	9	27	36
Swab from Diphtheria ...	3	8	11
	—	—	—
	15	68	83

Midwives' Act, 1902.

Notice of intention to practise was received from 54 registered midwives during the year 1907; one has given up practice, and one has left the town. Of these five have the certificate of the Central Midwives' Board, 15 have certificates from recognised institutions, 34 were registered as having been in bona-fide practice for one year prior to 31st July, 1902.

In accordance with the regulations of the Central Midwives' Board, I have received notifications of:—

105 still-births.

127 sending for medical help.

13 deaths of new-born children.

12 puerperal fever cases.

I have examined the case-books, instruments, and appliances of each midwife twice during the year, and find that they have attended 2927 cases out of a total of 4476 births.

Isolation of Infectious Diseases.

627 cases were admitted to the Hospitals at Deane, but no cases were admitted to the Smallpox Hospital at Ainsworth.

They consisted of scarlet fever, 539; enteric fever, 80; diphtheria, 3; puerperal fever, 1; erysipelas, 1; follicular tonsillitis, 3. The number is higher than the average of the last ten years, and the highest number since 1902.

The scarlet fever totalled 62 per cent. of those notified, and the enteric 42 per cent. The death-rate amongst the scarlet fever cases 3.3 per cent., and amongst the enteric 13.9 per cent. There was also one death of a diphtheria patient, but both the others, who were tracheotomised, recovered.

The report on the isolation of consumptive patients is given under a separate heading.

The staff during the year was increased by one person, and was as follows:—

1 Matron.	5 Wardmaids.
3 Sisters.	4 Laundresses.
3 Staff Nurses.	5 Servants.
1 Ambulance Nurse.	2 Gardeners.
8 Probationers.	2 Porters.

The work was naturally much heavier than it had been for several years, and a few exceptional cases were admitted, but, as will be seen, the staff was only increased by one wardmaid. That the staff had not to be materially increased was due to the excellent management of Miss Irene Webb, the Matron, and the willing co-operation and support of the Sisters and the rest of the staff.

Except that of Miss Webb, during the last month of the year, there has been no serious illness amongst the members of the staff.

Every effort has been made to maintain the Hospitals in good repair, and to keep the furniture, bedding and linen in good order and ready for emergencies.

The Sanitary Committee have on several occasions expressed their appreciation of the work done, the cleanly state of the wards, and the admirable management of the staff and patients.

TABLE XIV.
 ADMISSIONS AND DEATHS OF SCARLET AND ENTERIC FEVER PATIENTS IN 1907,
 DIVIDED ACCORDING TO AGE AND SEX.

AGES	SCARLET FEVER						ENTERIC FEVER						TOTAL	
	Males			Females			Males			Females			Total	
	Admit'ted	Died	Total	Admit'ted	Died	Total	Admit'ted	Died	Total	Admit'ted	Died	Total	Admit'ted	Died
Under 5 ...	74	6	141	4	4	10	4	...	4	2	6	...	147	10
5 to 10 ...	115	2	250	4	4	6	4	1	4	9	13	2	263	8
10 to 20 ...	52	...	130	...	...	...	8	1	8	14	22	3	152	3
20 to 30 ...	6	...	12	1	1	1	8	1	8	4	12	2	24	3
30 to 40 ...	2	...	5	1	1	1	9	1	9	10	19	2	24	3
Above 40 ...	...	...	1	...	...	...	2	1	2	6	8	2	9	2
Totals ...	249	8	539	10	10	18	35	15	35	45	80	11	619	29

Sanitary Work.

Abstract of Sanitary Work.

PLACES UNDER INSPECTION :—

Common Lodging-houses	...	...	...	...	...	64
Houses Let-in-Lodgings	...	...	...	...	...	61
Factories	...	...	...	...	...	297
Factory Chimneys	...	...	...	...	...	256
Workshops and Workplaces	...	...	...	...	...	609
Bakehouses	...	...	...	...	...	236
Public Houses	...	...	...	...	...	393
Offensive Trades	...	...	...	...	...	39
Slaughterhouses	...	...	...	...	...	54
Cowsheds	...	...	...	...	...	356
Milkshops	...	...	...	...	...	530
Public Sanitary Conveniences	...	...	...	...	...	18
Travelling Vans	...	...	...	...	...	93

ABSTRACT OF WORK DONE DURING 1907 :—

Complaints from Public	...	...	...	...	...	242
Nuisances Reported	...	...	...	...	...	3825
Letters Written or Verbal Notices	...	...	...	...	...	2008
Informal Notices Issued	...	...	...	...	...	876
Legal Notices Issued	...	...	...	...	...	485
Smoke Observations	...	...	...	...	...	599
Smoke Nuisances Reported	...	...	...	...	...	41
Notices Served	...	...	...	...	...	26
Smoke Prosecutions	...	...	...	...	...	9
Houses Fumigated	...	...	...	...	...	2660
Articles Disinfected	...	...	...	...	...	5606
Articles Destroyed	...	...	...	...	...	230
Houses, etc., Limewashed	...	...	...	...	...	376
Houses Demolished	...	...	...	...	...	43
Houses Closed	...	...	...	...	...	65
Houses Made Fit	...	...	...	...	...	24
Privy Ashpits Converted into Water Closets	...	...	...	...	...	680
Privy Ashpits Demolished	...	...	...	...	...	7
Drains Reconstructed	...	...	...	...	...	319
Houses in which Rubble Drains have been Abolished	...	...	...	...	...	130
Yards Completely Flagged	...	...	...	...	...	97
Samples of Food, etc., Purchased	...	...	...	...	...	401
Samples Adulterated	...	...	...	...	...	28
Adulteration Prosecutions	...	...	...	...	...	21

General Sanitary Work.

Scarlet fever has been rather more prevalent than for the last four years, and in consequence more of the time of the Inspectors has been taken up in obtaining information and reporting on this disease. There was also a bad epidemic of measles, and a considerable number of visits to schools and houses in connection therewith. Other infectious diseases have not been so prevalent.

The work in connection with the conversion of privy-middens and pails has been pushed forward and taken up considerable time, as has also that of unhealthy areas and unfit houses.

The staff of Inspectors has been fully occupied in these and other duties which have been considerably increased by new Acts of Parliament.

Sanitary Staff.

No change has taken place in the General Staff, but there has been an increase of one in that of the Borough Hospitals.

The present total staff under the Sanitary Committee consists of the following:—

- 1 Medical Officer of Health.
- 1 Food and Meat Inspector.
- 6 Sanitary Inspectors.
- 4 Clerks.
- 3 Ambulance Drivers and Disinfectors.
- 2 River and Urinal Cleaners.
- 11 Bath Officials.
- 5 Lavatory Attendants.
- 34 Hospital Staff (excluding Ainsworth Smallpox Hospital).

Housing of the Working Classes.

During 1907, of the unfit class of house, there were demolished 43, closed 65, and made fit 24, i.e., a total of 132. Of the above 71 were back-to-back and 28 single.

There are at present under the consideration of the Unhealthy Dwellings Sub-Committee, 6 reconstruction schemes, consisting of 230 houses, 3 buildings declared obstructive and 99 houses required to be

made fit for habitation, i.e., a total of 332 houses; of these 235 are either back-to-back or single houses. Of the 230 houses in the schemes, it is proposed to demolish 120 and to make fit 110. The areas for which schemes have been prepared are as follows:—

Turton Street...	79 houses,	34 to be demolished,	and 45 to be made fit.
Flash Street ...	44	32	12
Barlow Street...	52	26	26
Garden Street...	22	5	17
Gibson Court ...	13	8	5
Morgan Street..	20	15	5

There is still a considerable number of back-to-back and single houses in Bolton, but satisfactory progress is now being made in demolishing or making them fit for habitation, as will be seen above. Most of these are tenements of two rooms, but some are one roomed and a few three roomed. They correspond then very nearly with the one, two, and three roomed tenements of the Census, although these returns do not distinguish between back-to-back, single, and through houses as is done in sanitary work. The following details are set down as accurately as possible with the source of the information:—

Back-to-back and single, or 1, 2, and 3 Roomed Tenements.

Year.	No. of houses.
1891 ... Census Returns ...	3051
1896 ... Sanitary Office Enumeration ...	2604
1901 ... Census Returns ...	2558
1903 ... Sanitary Office Enumeration ...	2159
1904 ... " ...	2041
1905 ... " ...	1978
1906 ... " ...	1943
1907 ... " ...	1870

The number of back-to-back and single houses in wards is given in Table XVI.

Table XV. shows the work done in improving the working class houses during the last 34 years.

The amount expended, chiefly in demolitions, up to the end of 1907 was as follows:—

1874—1885	£6,775
1886—1895	£1,696
1896—1907	£15,159

TABLE XV.

ABSTRACT OF HOUSES DEMOLISHED, CLOSED, MADE FIT OR IMPROVED,
(1874 to 1907).

Date	Demolished	Closed	Made Fit	Improved	Total
1874—1885	...	...	...	...	293
1886—1895	...	...	...	...	245
1896	23	9	10	29	71
1897	85	14	24	21	144
1898	17	11	8	...	36
1899	22	7	3	...	32
1900	59	44	8	...	111
1901	42	22	79	...	143
1902	18	18	19	...	55
1903	85	20	19	42	166
1904	52	3	46	...	101
1905	39	9	10	10	68
1906	69	17	17	...	103
1907	43	65	24	...	132
	554	239	267	102	1162

TABLE XVI.

ENUMERATION OF BACK-TO-BACK AND SINGLE HOUSES IN WARDS, 1907.

Ward.	Without Available Yard Space		With Available Yard Space.		Total
	Back-to-Back	Single	Back-to-Back	Single	
East... ..	198	38	74	19	329
Derby	58	25	258	2	343
Bradford	91	43	182	26	342
Exchange	66	102	96	39	303
West	31	51	67	39	188
Church	2	9	97	4	112
Halliwell ... ..	...	6	20	46	72
North	6	1	...	3	10
Rumworth	6	...	...	4	10
Astley Bridge ... ..	...	3	14	32	49
Smithills ... ..	...	3	17	27	47
Darcy Lever-cum- Breightmet ... ..	...	...	14	4	18
Tonge ... ..	...	...	43	4	47
Total	458	281	882	249	1870

Closet Accommodation.

During the year 1907, there were 680 conversions of old privy-middens or pails into water-closets, and seven demolitions of the same type of closet in connection with insanitary property.

From 1899—1907 inclusive, 4743 closets have been converted at a cost to the Corporation of £9413, and replaced by water-closets, and 155 have been demolished.

In Public Houses during the same period 118 water-closets were added for customers; in the Public Elementary Schools 94 have been provided, and 745 fresh-water closets and 110 pails in factories and workshops, where also 32 cesspools were abolished.

That is in nine years, a total of 5700 closets have been provided on the water-carriage system, in addition to those provided in new houses, viz., 5078.

The present number of privy-middens and pails as compared with those of 1898 are:—

District.	Privy-middens.		Pails.	
	1898,	1907.	1898.	1907.
Old Borough	12740	8929	6782	6572
Added Area	7581	6780	22	26
Whole Borough	20321	15709	6804	6598

In the Old Borough in 1898 the numbers were:—

Privy-middens and pails together	...	...	19522
Water-closets	...	...	7587

At present the numbers are:—

Privy-middens and Pails	...	...	15501
Water-closets	...	...	13104

Formerly in the Old Borough 75 per cent. were on the dry system and 25 per cent. on the water-carriage system, now 54 per cent. are on the dry system and 46 per cent. on the water-carriage system.

CLOSETS IN PUBLIC HOUSES.

Of the 393 public houses in the Borough, 382 have two or more closets, and 11 have only one closet. The figures for 1906 were:— 398 with two closets, and 17 with one closet. Of these latter, five have provided sufficient accommodation and one public house has been closed.

During the year, 19 privy-middens and two pails were converted into fresh-water closets, and five fresh-water closets were added to make up an insufficiency, i.e., total 26 fresh-water closets.

Of the 11 public houses having only one closet:—

9 are on the privy-midden system (two in Old Borough and seven in the Added Area).

2 are on the fresh-water system.

The 382 public houses having two or more closets are divided up as follows:—

257 have two or more water-closets.

81 have at least one water-closet and one privy-midden or pail.

44 have two closets on the dry system (privy-midden or pail).

In other words, 67 per cent. are wholly on the water-carriage system, 89 per cent. have at least one water-closet, 11 per cent. are on the dry system.

During the last nine years (1899—1907) 276 fresh-water closets and 10 waste-water closets have been provided generally in place of insanitary privy-middens and pails in public houses.

CLOSETS IN SCHOOLS.

During the year five fresh-water closets have been provided in place of insanitary privy-middens in Sharples British School, Bank Top. 57 schools are provided with fresh-water closets, 1 with privy-middens and fresh-water closets, and 3 with privy-middens.

TABLE XVII.
CLOSET ACCOMMODATION, 1907.

	No. of Closets Converted or Demolished, 1907		Conversions in Old Houses and Additions in New Houses, 1907				Present Closet Accommodation, 1907				Per Cent. on	
	P.M.	Pail	P.M.	Pail	W.W.C.	F.W.C.	P.M.	Pail	W.W.C.	F.W.C.	Dry System	Water System
Old Borough ...	500	31	...	...	637	85	8929	6572	10039	3065	54	46
Great Lever ...	9	...	...	...	101	1	1519	...	821	131	61	39
Tonge ...	47	...	...	...	147	1	1558	...	668	34	68	32
Astley Bridge ...	46	...	...	...	36	29	1203	7	449	234	64	36
Smithills ...	21	...	...	...	31	5	548	3	582	142	43	57
Hulton ...	27	...	...	...	47	12	644	...	450	36	57	43
Darcy Lever-cum- Brightmet ...	...	...	2	...	16	...	657	...	155	54	75	25
Deane-cum-Lostock.	...	...	...	...	65	1	420	4	173	72	63	37
Heaton ...	6	...	...	...	26	18	231	12	145	241	38	62
Extended Borough...	656	31	2	...	1106	152	15709	6598	13482	4009	56	44

Common Lodging Houses.

There are now 64 registered houses in Bolton, a decrease of one. Four houses were closed and three others placed on the register during 1907. They are distributed thus:—

Ward.	Houses.	Rooms.	Beds.
Exchange	32	157	586
East	29	148	792
Church	2	14	58
Derby	1	10	43

Accommodation for the sexes:—

Description.	Houses.	Males.	Females.	Couples.
Males only	39	1067	—	—
Females only	1	—	8	—
Couples only	2	—	—	9
Females and Couples ...	3	—	23	8
Males and Couples ...	8	110	—	21
Males, Females and Couples	11	136	50	47
	—	—	—	—
	64	1313	81	85

One keeper was fined 5/- and costs for failing to limewash at the proper time.

Houses Let-in-Lodgings.

During the year 1907, six houses have been placed on the register, thus making a total of 61 registered houses in the Borough. They are distributed in the wards thus:—

Exchange	49
East	10
Church	2

The rooms let by these houses are as follows:—

1 house lets	8 rooms.
4 houses let	6 rooms.
4 „ „	5 „
1 „ „	4 „
21 „ „	3 „
18 „ „	2 „
12 „ „	1 „

Canal Boats.

No boats that were used as dwellings, came within the district of this Authority during the year 1907.

Vans, Tents, &c.

10 vans situated in Morgan Street, Astley Bridge, were inspected in February; 27 vans on the Wholesale Market, Bridge Street and Smiths Yard, and 15 at Bridgman Street were inspected at Whitsuntide; 14 situated in Wolfenden Street were inspected in September, and 42 vans on the Wholesale Market and Victoria Square, 20 at Bridgman Street, and 14 at Morgan Street during Christmas and New Year.

One case of phthisis was reported in a van in Morgan Street, and a death from diarrhoea occurred in one off Wolfenden Street. The refuse from the different vans was removed daily by the Scavenging Department.

Factories.

30 complaints were received from Factory Inspectors during 1907, of which 15 referred to insufficient and unsuitable closet accommodation, and six to insufficient means of escape in case of fire.

During the year 106 fresh-water closets and 32 pails were provided in 27 factories in place of old and insanitary closets or as additions. In the nine years 1899—1907 there have been provided 745 fresh-water closets and 110 pails.

In the 297 factories the closet accommodation for females consists of 825 fresh-water closets, 57 pails, 26 privy-middens, 26 privies. That for males consists of 1209 fresh-water closets, 135 pails, 55 privy-middens, 39 privies.

Comparison of closet accommodation in factories in 1900 with that of 1907:—

Year.	No of. Factories.	F.W.C.	Pails.	P.M. Type.	Cesspools.
1900	260	1525	194	298	33
1907	297	2034	192	146	0

Workshops and Workplaces.

9 complaints were received from Factory Inspectors during 1907, of which 8 referred to cleansing and limewashing, and 1 to defective ventilation. The workshops, including bakehouses and laundries, number 845, the employees 1888 males, and 1384 females.

The number and character of trades in workshops are:—

Trade.	No. in Trade.	Trade.	No. in Trade.
Bakers	236	Cycle Makers	5
Boot and Clog Makers	114	Brush Makers	5
Dressmakers	96	Shirt Makers, etc.	5
Millinery, etc.	59	Chemists	4
Tailors, etc.	47	Athletic Goods	4
Joiners, etc.	26	Rag Sorters	4
Tinplate Workers	19	Window Blind Makers	3
Cabinet Makers	16	Clog Iron Makers	3
Ice Cream Manufacturers	15	Leather Dealers	3
Confectioners	13	Bedding	3
Plumbers	13	Umbrella Makers	3
Saddlers	10	Tarpaulin	3
General Smiths	9	Tripe Works	3
Stocking Knitters	9	Skip Makers	3
Drapers	9	Brass Founders and Finishers	2
Laundries	8	Coach Builders	2
Wheelwrights	7	Picture Framers	2
Horse-shoeing	7	Masons	2
Chemical Works	6	Painters	2
Coopers, etc.	6	Sign Writers	2
Cotton-waste Warehouses	6	Photographers	2
Watch and Clock Makers	5	Paper Dealers	2
Ironmongers	5	Pickle Makers	2
Printers	5	Bookbinders	2
		Miscellaneous	28

Bakehouses.

There are at present on the register 236 bakehouses, 25 new ones, generally in connection with small shops, having been added during the year, and 4 closed.

Of these 24 are underground, and certified in accordance with Section 99 of the Factories and Workshops Act, 1901.

TABLE XIX.

1.—INSPECTION.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries) ...	586	60	...
Workshops (including Workshop Laundries).	1278	35	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report ...)	145	4	...
Total	2009	99	...

2.—DEFECTS FOUND.

Particulars	Number of Defects			Number of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts:—</i>				
Want of cleanliness	86	73	...	...
Want of ventilation	6	4	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors	2	2	...	...
Other nuisances	70	65	...	...
Sanitary accommodation {	insufficient ...	26	22	...
	unsuitable or defective ...	54	48	...
	not separate for sexes ...	2	...	...
<i>Offences under the Factory and Workshop Act:—</i>				
Illegal occupation of underground bakehouse (s. 101) ... ..	...	...	...	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)... ..	...	...	...	...
Other offences (excluding offences relating to outwork which are included in part 3 of this report) ... ..	...	...	...	...
Total	246	214	...	...

TABLE XIX.—(Continued.)
3.—HOME WORK.

	Number of	
	Lists	Outworkers
<i>Lists of Outworkers (s. 107):—</i>		
Lists received twice in the year	32	337
Addresses of outworkers	{ forwarded to other Authorities 15 { received from other Authorities 2	
Inspections of Outworkers' Premises	221	
<i>Homework in unwholesome or infected premises:—</i>		
Notices prohibiting homework in unwholesome premises (s. 108)	Wearing Apparel	Other
	2	...
Cases of infectious disease notified in homeworkers' premises	1	...
Orders prohibiting homework in infected premises (s.110)	1	...

4—REGISTERED WORKSHOPS.

	Number
Workshops on the Register (s. 131) at the end of the year;—	
Important classes of workshops, such as workshop bakehouses may be enumerated here. { Bakehouses including underground 236 { Other Workshops 609	
Total number of workshops on Register	845

5.—OTHER MATTERS.

Class	Number
<i>Matters notified to H.M. Inspector of Factories:—</i>	
Failure to affix Abstract of the Factory and Workshop Act, (s. 133)	26
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) ...	24
	{ Notified by H.M. Inspector 24 { Reports (of action taken) sent to H.M. Inspector ... 17
Other (Fire Escapes)	3
<i>Underground Bakehouses (s. 101):—</i>	
Certificates granted during the year ... ..	...
In use at the end of the year	24

TABLE XX.

BAKEHOUSES IN WARDS, 1907.

Ward	Total	Ground Level	Underground
West	34	34	...
Halliwell	32	30	2
Bradford	28	23	5
Derby	29	26	3
East	15	12	3
Church	15	11	4
Rumworth	10	10	...
North	9	8	1
Exchange	16	11	5
Old Borough	188	165	23
Great Lever	18	18	...
Tonge	10	10	...
Astley Bridge	5	5	...
Smithills... ..	3	2	1
Hulton	9	9	...
Darcy Lever-cum-Brightmet... ..	...	...	...
Deane-cum-Lostock	3	3	...
Heaton ... ..	...	...	...
Added Area	48	47	1
Extended Borough	236	212	24

Smoke Abatement.

Observations 599, nuisances reported 41, notices served to abate 26, prosecutions 9, convictions 6, fines totalling £15, making an average of 50/- per case. Such is the summary for the year 1907.

To put it in another way, there were 32 out of 256 firms on the "black list." One firm was prosecuted twice, five firms were prosecuted once each, 26 firms were served with notice to abate, and three firms were cautioned.

The Sanitary Committee, by resolution on 12th September, 1906, reduced the standard time which constitutes a nuisance from $2\frac{1}{2}$ minutes to 2 minutes, so that any chimney from which smoke issues for as much as 2 minutes in the half-hour is deemed to be causing a nuisance.

An inspection of the table in which the chimneys are arranged in classes shews that 129, i.e., more than half the factory chimneys in the Borough, emit quantities of black smoke in less quantities than 1 minute in the half-hour, and there ought to be no difficulty in getting all the others to behave in the same way, especially as 50 of these have no difficulty in keeping their chimneys practically smokeless.

It is only fair to mention that of the 32 firms placed in the IVth class of table 22, in 20 a nuisance was detected only on one occasion.

TABLE XXI.

SUMMARY OF SMOKE OBSERVATIONS, 1907.

Month.	Observations	Nuisances Reported	Warnings given	Notices Served	Prosecutions	Convictions	Amount of Fines
January	59	3	...	3	...	...	...
February	50	5	1	4	...	...	...
March	50	4	2	2	...	...	...
April	51	5	3	...	2	...	...
May	61	2	...	1	1	1	£5 and Costs
June	53	5	...	5	...	...	...
July	64	6	...	4	2	1	10/- and Costs
August	26	1	...	1	...	...	...
September	54	4	...	4	...	...	...
October	40	...	...	...	...	...	...
November	54	4	...	2	2	2	Costs £7 and Costs
December	37	2	...	...	2	2	£2 and Costs 10/- and Costs
Total	599	41	6	26	9	6	£15 and Costs

TABLE XXII.

CHIMNEYS UNDER OBSERVATION, ARRANGED IN CLASSES, 1907.

Class		Districts						Total
		1	2	3	4	5	6	
1	No. of Chimneys that have emitted practically no black smoke in $\frac{1}{2}$ hour's observation...	11	7	10	7	13	2	50
2	No. of Chimneys that have emitted under 1 minute of black smoke in $\frac{1}{2}$ hour's observation ...	11	13	11	19	18	7	79
3	No. of Chimneys that have emitted 1 minute but less than 2 minutes of black smoke in $\frac{1}{2}$ hour's observation...	10	20	21	8	18	18	95
4	No. of Chimneys that have emitted 2 or more minutes of black smoke in $\frac{1}{2}$ hour's observation ...	1	2	6	1	15	7	32
	TOTAL ...	33	42	48	35	64	34	256

TABLE XXIII.
PRACTICALLY SMOKELESS CHIMNEYS.

No.	Firm	Situation	Boilers	Apparatus
1	R. H.	Nelson Square ..	1	Booty's Patent
2	M. S.	Deansgate ...	1	No Apparatus
3	R. S. & Co.	Bowker's Row ...	1	No Apparatus
4	E. A.	Deansgate ...	1	No Apparatus
5	E. S.	Central Street ...	1	No Apparatus
6	E. W.	Oxford Street ...	1	No Apparatus
7	R. W.	Bolling's Yard ...	1	No Apparatus
8	C. & W., Ltd. No. 4	Gilnow	4	Cass's Cokers
9	W. H. H. & Co., Ltd.	Lostock	1	No Apparatus
10	M. S. Co., Ltd.	Gilnow	2	Bennis's Stoker on One
11	J. W. M.	Gilnow	1	No Apparatus
12	M. S. Co., Ltd.	Halliwell Road ...	2	Automatic Synd. Co.'s Stokers
13	B. & J., Ltd., & K., Ltd.	Egyptian Street ...	5	Triumph and Cass's Stokers
14	B. & J., Ltd.	Higher Bridge St...	3	Cass's Cokers
15	H. S. Co., Ltd., Nos. 1 & 2	Chorley Old Road	6	Bennis's Stokers
16	K. Ltd.	Vernon Street ...	2	Hodgkinson's & Triumph St.
17	J. C.	Gray Street ...	1	No Apparatus
18	W. E. & S., Ltd.	Brownlow Fold ...	2	No Apparatus
19	B. & J., Ltd., No. 1	Prospect Street ...	1	Cass's Cokers
20	B. & J., Ltd., No. 2	Prospect Street ...	3	Cass's Cokers
21	B. & J., Ltd., No. 3	Prospect Street ...	3	Cass's Cokers
22	W. M. & Co., Ltd. (Spinning)... ..	Regan Street ...	2	Proctor's Stokers
23	W. M. & Co., Ltd. (W'ving) No. 1	Regan Street ...	2	Proctor's Stokers
24	W. M. & Co., Ltd. ,, No. 2	Regan Street ...	2	Proctor's Stokers
25	E. & T., Ltd.	Waters Meeting ...	10	Hodgkinson's Stokers
26	G. & S., Ltd.	Astley Bridge ...	2	Bennis's Stokers

TABLE XXIII.—Continued.

PRACTICALLY SMOKELESS CHIMNEYS.

No.	Firm	Situation	Boilers	Apparatus
27	J. C. & Bro., Ltd.	Eagley Mills	3	British Syndicate's Patent
28	A. H. & S.	Simpson Street	1	No Apparatus
29	M. H. S. Co., No. 1	Mill Hill	3	Hodgkinson's Stokers
30	M. H. S. Co., No. 2	Mill Hill	3	Hodgkinson's Stokers
31	J. H. & Co.	Brightmet Street..	1	Own make of Stoker
32	H. Bros.	China Lane	3	Bennis's Stokers
33	W. G. & S., Ltd.	Lever Bridge	2	Triumph Stoker
34	G. T.	All Saints Street ...	1	No Apparatus
35	W. H. & S.	Burnden	1	No Apparatus
36	C. & W., Ltd., No. 1	Lever Street	3	Vickers' Cokers
37	C. & W., Ltd., No. 2	Lever Street	3	Vickers' Cokers
38	C. & W., Ltd., No. 3	Lever Street	4	Cass's Cokers
39	C. & W., Ltd., No. 5	Roxalina Street	4	Cass's Cokers
40	J. H. & S., No. 2	Rishton Lane	2	Cass's Cokers
41	E. & C.	Slaterfield	1	No Apparatus
42	P. C. Ltd.	Lever Street	4	Bennis's Stokers
43	J. J. & Sons, Ltd.	Weston Street	2	Cass's Cokers
44	H. H. & Son	Back Derby Street..	1	Specially Constructed Boiler
45	W. & McK.	Weston Street	2	Triumph Stokers
46	J. F.	Parkfield Road	1 Kiln.	None
47	J. B. & Sons	Pilkington Street...	1	No Apparatus
48	B. C. S. Wks.	Hacken	1	No Apparatus
49	D. S. S. Co.	Thomas Street	2	Cass's Cokers
50	H. P. & Co.	Wigan Road	2	Bennis's Stokers

Cowsheds, Dairies and Milkshops.

There are now 166 occupiers of 356 cowsheds. During the year two cowsheds were added and one demolished. Of the 12 cowsheds reported as unsatisfactory last year five have been made satisfactory, and there still remains seven to be dealt with.

The registered milksellers number 530, and are distributed in the wards as shewn in the table.

Offensive Trades and Slaughterhouses.

One tripe boiling place has been given up, leaving a total of 10 in the Borough, and this is the only difference made since the last report.

TABLE XXIV.
REGISTERED COWKEEPERS AND DAIRYMEN, AND MILKSELLERS,
1907.

Wards	Cowkeepers and Dairymen	Milksellers
West	1	97
Bradford ... ..	...	111
Derby	1	76
Halliwell	2	61
East ... ..	...	51
Church ... ..	...	22
Rumworth	4	22
North ... ..	...	23
Exchange ... ..	...	38
Great Lever	7	8
Tonge	7	6
Astley Bridge	23	3
Smithills... ..	20	6
Hulton	27	2
Darcy Lever-cum-Breightmet... ..	16	2
Deane-cum-Lostock	36	1
Heaton	22	1
TOTAL	166	530

TABLE XXV.

PRESENT CONDITION OF COWSHEDS, 1907.

	Districts						Total
	1	2	3	4	5	6	
No. of Cowkeepers...	...	...	...	...	...	...	...
No. of Cowsheds in good Sanitary Condition ...	43	21	39	10	33	20	166
No. of Cowsheds in fair Sanitary Condition ...	40	15	32	7	26	10	130
No. of Cowsheds in an Insanitary Condition ...	3	5	5	2	6	8	29
No. of Cowsheds in an Insanitary Condition ...	...	1	2	1	1	2	7

TABLE XXVI.

OFFENSIVE TRADES AND SLAUGHTERHOUSES.

Trade	Added Area	West	Halliwell	Bradford	Derby	East	Church	North	Rumworth	Exchange	Total
Fellmonger, Tanner, and Leather Dresser		1		1							2
Fellmonger and Tanner						1					1
Leather Dresser and Roller							1			1	2
Hide and Skin Dépôt						1				1	2
Knackers' Yard							1				1
Blood Boiler				1			1				2
Tallow Melter										1	1
Chemical Works	1				1	1	3				6
Tar and Oil Distillers							2				2
Muriatic Acid Works	1										1
Tar and Sulphate of Ammonia Works	1										1
Tripe Boiler	1			3	1	2	2			1	10
Brick Works	5		1						1		7
Soap Works	1										1
Slaughterhouses	9	4	3	22	2	3	4	1	1	5	54
Total	19	5	4	27	4	8	14	1	2	9	93

Meat and Food Inspection.

Two important Acts were passed during the year, dealing with this branch of sanitary work, viz. :—

The Butter and Margarine Act, 1907.

Public Health (Regulations as to Food) Act, 1907.

The former has considerably extended the powers of local authorities, and may be summarised as follows:—

REGISTRATION.—All butter factories, all milk-blended butter factories or premises in which there is carried on the business of a wholesale dealer in milk-blended butter, are to be registered, and written notice of any change of address is to be sent to the Local Authority.

Margarine factories and premises for the business of a wholesale dealer in margarine were made registerable with the Local Authority under the Sale of Food and Drugs Act, 1887—1899.

LOCAL INSPECTORS.—Local Inspectors have the same power as Board of Agriculture Inspectors, i.e., can enter, inspect and take samples from any butter factory, milk-blended butter factory or wholesale premises, margarine factory, or wholesale premises. Can take samples in any place, and when the substance is en route in the case of margarine and milk-blended butter.

DEFINITION OF MARGARINE.—Any article of food, whether mixed with butter, or not which resembles butter and is not milk-blended butter, shall be labelled margarine.

WRAPPERS AND NAMES.—Margarine must be described as margarine, and if a fancy name is used as well, it must be registered with the Board of Agriculture, and must not be larger than the word margarine nor in any other colour.

Milk-blended butter can only be sold under a special name approved by the Board of Agriculture, and the letters must be at least $\frac{1}{2}$ -inch in depth. The percentage of moisture must be on the wrapper and it must be consigned under its registered name. Any name suggestive of butter will not be approved of either for milk-blended butter or margarine.

MOISTURE.—Butter and margarine must not have more than 16 per cent. of water and milk-blended butter more than 24 per cent., even if found on their premises for sale or for consignment.

PRESERVATIVES.—The Local Government Board may make regulations for prohibiting the use of any substance as a preservative or for limiting the amount in butter, margarine or milk-blended butter.

OTHER SUBSTANCES.—Any substance intended to be used for adulteration or any fat capable of being so used and found on the premises shall be deemed to be an offence under this Act.

PENALTY.—Offenders are liable on a first offence to a fine not exceeding £20, on a second offence to a fine not exceeding £50, and a third not exceeding £100 or imprisonment.

The Public Health (Regulations as to Food) Act, 1907, enables regulations to be made for the prevention of danger arising to public health from the importation, preparation, storage, and distribution of articles of food and drink (other than drugs or water) intended for sale for human consumption.

The regulations can provide for the examination and taking of samples of any such articles.

Articles commonly used for food or drink of man shall be deemed to be intended for sale for human consumption unless the contrary is proved.

Under the Sale of Food and Drugs Act, 1887—1899 and Butter and Margarine Act, 1907, there have been registered with the Local Authority:—

Wholesale Margarine Dealers	...	...	...	...	18
Margarine Factories	...	...	...	...	Nil.
Butter Factories	...	...	...	...	Nil.
Wholesale Milk-blended Butter Dealers	...	...	...	...	1

UN SOUND MEAT AND FOOD.

There has been one seizure of unsound food, viz.:—2 cwt. of fruit, for which a fine of 5/- and costs was imposed by the Justices. 65 carcasses weighing 23,397 lbs. were surrendered and destroyed; 57 carcasses were from slaughterhouses and eight from farms and cow-sheds; 30 were those of tuberculous cows. Of the 65 carcasses, 47 were beasts, 5 sheep, 7 pigs and 6 calves. In addition to the above 308 rabbits, 2,200 eggs, 4,000 sheep's feet, 66 baskets of fruit, 1 ton, 15 cwt. of vegetables, and 15 tons, 8 cwt. of fish were destroyed.

Inspections:—

Beasts	...	...	...	...	7160
Sheep and Lambs	...	...	...	...	24314
Pigs	...	...	...	...	11160
Calves	...	...	...	...	1217
Store Cattle	...	...	...	...	3192
Slaughterhouses and Butchers' Shops	...	...	...	...	2968

Meat destroyed in each month:—

Month.		Carcases.		Weight in lbs.
January	...	2	...	540
February	...	5	...	2205
March	...	7	...	1966
April	...	8	...	2600
May	...	6	...	1810
June	...	9	...	4250
July	...	3	...	1450
August	...	4	...	1800
September	...	3	...	1700
October	...	6	...	2310
November	...	5	...	860
December	...	5	...	1906
				23397

PUBLIC ANALYST'S REPORT AND SUMMARY, 1907.

GENTLEMEN,

I have to report to you that during the year 1907 I have had submitted to me for analysis, under the Sale of Food and Drugs Acts, 401 samples, comprising 12 different classes.

Milk, as its supreme importance demands, again heads the list with rather over one-half the total number (207), followed by butter and margarine.

The great majority of the prosecutions instituted had reference to milk, and I am glad to be able to report that the magistrates, on many occasions, took a more serious view of the offence than had formerly been the case. One fine of £10 and costs, one of £5 and costs, four of £3 and costs, and others of £2, £1, etc., were inflicted. Altogether, £39 4s. 6d. and costs was the amount inflicted in fines.

One analysis was disputed, and the duplicate sample submitted to Somerset House, when 52 days old. I need not refer to this matter further than to say that there is ample proof that an accurate analysis of milk so decomposed is impossible. The matter has been before you, however, with the result that you recommend that all adulterated samples be reported on as soon as possible, to enable the vendor, if he desires, to have his sample analysed while undecomposed. I may add that this had already been the rule in almost all cases; it was so in the one under notice.

Some new laws came into force this year which will be of great assistance. These fix a definite standard for the amounts of water in butter, margarine, and milk-blended butter. They shall be the subject of my best attention.

I hope to further extend the usefulness of my office and to merit your entire confidence.

Believe me,

Yours faithfully,

WALTER RATCLIFFE, F.C.S.,

Public Analyst.

Public Laboratory, 21, Mawdsley Street, Bolton.

SUMMARY OF ADULTERATED SAMPLES.

No. of Sample.	Description.	Fines
2	Margarine	2/6 and costs.
3	Margarine	Costs only.
4	Margarine	Costs only.
5	Butter	£2 2s. 0d. and costs.
9	Butter	Costs only.
62	Butter	£5 and costs.
63	Butter	Costs only.
103	Milk	10/- and costs.
269	Milk	5/- and costs.
273	Milk	£3 and costs.
274	Milk	£3 and costs.
275	Milk	£3 and costs.
276	Milk	5/- and costs.
283	Milk	£3 and costs.
289	Milk	£1 and costs.
296	Milk	No prosecution.
299	Milk	Informal sample.
305	Milk	£5 and costs.
312	Milk	Informal sample.
313	Milk	Informal sample.
319	Milk	10/- and costs.
324	Milk	£2 and costs.
325	Milk	10/- and costs.
333	Milk	Informal sample.
334	Milk	£10 and costs.
335	Milk	Costs only.
336	Skim-milk	Total solids more than 11½ per cent. No prosecution.
337	Skim-milk	Total solids more than 11½ per cent. No prosecution.

TABLE XXVII.
HIGH STREET BATHS—NUMBER AND CLASS OF BATHERS, 1907.

Month	No. of Weeks	Swimming Bath		Slipper Baths		Needle Baths	Vapour Baths	Season Ticket Holders	School Children's Holiday Tickets	School Children	Total	Corresponding period last year
		at 4d.	at 2d.	at 6d.	at 4d.							
January	5	260	657	59	91	10	20	195	2	...	1294	1643
February	4	226	757	46	70	7	20	175	...	...	1301	1510
March	4	323	1308	57	97	11	27	184	1	...	2008	2218
April	4	503	1927	118	125	18	50	170	11	...	2922	3131
May	5	988	3256	174	226	22	67	226	158	1753	6870	6989
June	4	1076	3367	161	207	23	35	179	83	2834	7965	8480
July	5	1908	5656	231	302	27	52	231	115	3778	12300	11605
August	4	1379	4222	290	339	26	56	142	957	431	7842	8217
September	4	862	3019	122	152	27	15	146	335	...	4678	5644
October	3	500	1989	58	138	32	46	119	...	...	2882	2041
November	6	613	2066	110	138	35	48	234	9	...	3253	2599
December	4	372	922	74	86	19	28	114	...	...	1615	1360
Total	52	9010	29146	1500	1971	257	464	2115	1671	8796	54930	55437

TABLE XXVIII.

TURKISH BATHS.—NUMBER AND CLASS OF BATHERS, 1907.

Month	No. of Weeks	Massage	Books of Tickets		Cash Tickets		Slipper Baths		Medicated Baths	Total	Corresponding period last year.
			1st Class	2nd Class	1st Class	2nd Class	1st Class	2nd Class			
January ...	5	39	45	27	106	116	16	20	3	372	409
February ...	4	56	43	25	101	102	9	11	2	349	359
March ...	4	10	35	25	93	69	6	9	—	247	366
April ...	4	33	40	16	127	104	8	6	5	339	348
May... ..	5	63	65	23	144	129	9	19	3	455	393
June... ..	4	22	41	24	96	83	8	11	2	287	329
July... ..	5	19	43	25	141	121	22	23	4	398	456
August ...	4	13	32	33	90	109	17	18	5	317	362
September ...	4	7	30	19	125	89	7	13	2	292	304
October ...	3	16	22	26	90	78	2	12	3	249	272
November ...	6	34	54	41	170	126	13	18	4	460	508
December ...	4	33	48	30	114	77	16	7	6	331	316
Total ...	52	345	498	314	1397	1203	133	167	39	4096	4422

Scavenging Operations, 1907.

I am indebted to Mr. F. Smith, the Scavenging Superintendent, for the following report of the Scavenging operations:—

OLD BOROUGH.

Collection of Refuse:—

53,340 $\frac{1}{4}$	tons	from the	ashpits and closets.
11,553	„	„	streets and markets.
1,138 $\frac{1}{2}$	„	„	abattoirs.
1,257 $\frac{1}{2}$	„	„	lock-up shops.
576 $\frac{1}{2}$	„	„	Falcon and Wellington Yard stables.
2,901	„	of private refuse	disposed of at the depots.
<hr/>			
70,766 $\frac{3}{4}$	tons.		

Disposal of Refuse:—

19,032 $\frac{1}{2}$	tons	sold as manure	to farmers.
5,638	„	tipped	away.
1,081 $\frac{1}{2}$	„	incinerated	at Hacken Sewage Works.
42,978	„	incinerated	at Wellington Yark and Back-c'-th'- Bank Works.
2,036 $\frac{3}{4}$	„	surplus moisture	drained into sewers.
<hr/>			
70,766 $\frac{3}{4}$	tons.		

Expenditure:—

	£	s.	d.
Cost of Collection and Cartage	11872	1	1
„ Incineration	1900	14	11
„ Mortar making	2565	9	11
„ Manure grinding	593	13	8
„ Wagon loading	728	2	0
<hr/>			
Total expenditure	£17660	1	7

Income:—

Manure sales, after paying £1808 3s. 11d.			
for railway carriage... ..	1069	12	1
Net value of Mortar sales	3740	2	1
<hr/>			
Net cost	£12850	7	5

Snow removal:—

Amount paid for extra men and carts...			
	212	9	3
<hr/>			
Total cost	£13062	16	8

The costs given in the foregoing summary include all wages paid, provender used, 12 per cent. per annum depreciation on horses and plant, current repairs and tools; in fact, all charges except those paid on the sites of the depots and the initial outlay upon the buildings and machinery.

Mortar Making and Incineration :—

	Wellington Yard.		Back-o'-th'- Bank.
Bricklayer's Mortar ...	8818 $\frac{3}{4}$ Tons.	...	5359 Tons.
Special Mortar ...	375 $\frac{1}{2}$ Tons.	...	211 $\frac{1}{2}$ Tons.
	<hr/> 9194 $\frac{1}{4}$ Tons.	...	<hr/> 5570 $\frac{1}{2}$ Tons.
Refuse burned ...	24126 $\frac{1}{2}$ Tons	...	18851 $\frac{1}{2}$ Tons.
	£ s. d.		£ s. d.
Bricklayer's Mortar, sold at 5/- per ton ...	2204 13 9	...	1339 15 0
Special Mortar, sold at 6/8 per ton ...	125 3 4	...	70 10 0
	<hr/> £2329 17 1		<hr/> £1410 5 0
	£ s. d.		£ s. d.
Cost of Incineration ...	1195 10 3	...	705 4 8
Cost of Mortar making	1556 0 11	...	1009 9 0
	<hr/> £2751 11 2	...	<hr/> £1714 13 8

Carts and Horses :—

During the year the Scavenging Department employed 49 horses upon the foregoing operations, and had in use, more or less, the under-tabulated vehicles :—

41 Carts.	75 Railway Wagons.
8 Street Water Vans.	8 Depots Manure Wagons.
4 Pail Closet Vans.	24 Destructor Clinker Wagons.
6 Pail Closet Tanks.	8 Mortar Carts.
1 Iron Tan ¹ for Cesspools.	3 Jobbing Carts.
8 Street Sweeping Machines.	1 Lurry.
16 Handcarts	1 Wagonette.
32 Barrows.	8 Iron Clinker Barrows.
1 Covered Ashvan.	

ADDED AREA :—

	Scavenging The roads were scavenged for			Ashpit emptying The ashpits were emptied for		
All the Main Roads ...	1286	10	0	...	...	...
Great Lever Highways	245	1	5	...	564	5 9
Tonge do.	111	16	8	...	455	5 9
Brightmet do.	34	3	11	...	Contract	
Darcy Lever do	38	15	2	...	Contract	
Middle Hulton do.	86	0	7	...	152	18 11
Over Hulton do.	38	2	7	...	98	14 1
Heaton do.	88	14	8	...	Contract	
Smithills do.	203	15	9	...	307	15 6
Deane do.	...	...	...	...	108	8 8
	<hr/>			...	<hr/>	
	£2133	0	9	...	£1687	8 8
	<hr/>				<hr/>	

The following table shows the number of cartloads of road and ashpit refuse disposed of by the Scavenging Department during the year :—

	Main Roads.	Highways.	Ashpits.
Great Lever ...	617	700	2650
Tonge ...	515	520	2792
Brightmet ...	245	182	—
Darcy Lever ...	—	270	—
Middle Hulton ...	348	161	1194
Over Hulton ...	160	140	727
Deane ...	154	—	769
Heaton ...	565	245	—
Lostock ...	70	—	—
Smithills ...	436	726	1725
	<hr/>	<hr/>	<hr/>
	3110	2944	9857
	<hr/>	<hr/>	<hr/>

During the year 1604 loads of snow were removed from the Main Roads and Highways, the costs for which are included in the above charges.

The costs given in the " Added Area " summary include all wages paid, carts hired, current repairs, and tools used. An average load of road scrapings and sweepings will weigh about 1 ton, and an ashpit, etc., load about $1\frac{1}{4}$ tons.

FRED SMITH,
Superintendent.

Appendix.

CAUSES OF DEATH	Total	SEX		AGE.															
		M	F	0	1	2	3	4	5	10	15	20	25	30	35	40	4		
				to 1	to 2	to 3	to 4	to 5	to 10	to 15	to 20	to 25	to 30	to 35	to 40	to 45	to 50		
A.—General Diseases.																			
I.—Zymotic.																			
Smallpox { Vaccinated... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox { Not Vaccinated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox { No statement	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cow-pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	234	133	101	64	92	43	12	10	12	...	...	1	...	...	...	...
Epidemic Rose-rash, German	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	30	17	13	...	2	3	5	7	10	2	...	1	...	...	...	...
Typhus ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	42	29	13	2	...	1	...	1	2	1	1	...	4	2	3	...	...
Whooping Cough	64	28	36	30	21	6	3	2	2	...	...	...	...	...	...	...	...
Mumps ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria & Membranous Croup	20	9	11	3	2	2	4	...	7	...	1	...	...	...	...	...	...
Cerebro-Spinal Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Simple Continued Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	26	10	16	...	...	...	...	...	4	1	4	2	5	1	2	2	...
Asiatic Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Diarrhœa—Epidemic	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
or Zymotic Enteritis	36	16	20	26	7	1	...	...	...	...	...	...	...	...	...	...	...
<i>Diarrhœa, Choleraic Diarrhœa</i> ...	30	20	10	21	2	...	...	1	...	...	...	...	...	...	...	...	...
Dysentery ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malarial Fever	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydrophobia ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders, Farcy ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax, Splenic Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tetanus ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis	5	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...
Gonorrhœa, Stricture of Urethra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Septicæmia, Sapræmia	6	...	6	...	...	...	...	...	...	...	...	2	2	1	1	...	...
{ Pyæmia	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Phlegmasia Dolens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ (Thrombosis)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ <i>Fever</i>	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Endocarditis	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Pneumonia,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonic Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Septicæmia (not Puerperal)	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Pyæmia (not Puerperal)	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Phlegmon, Carbuncle (not	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax)	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phagedœna ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases	2	2	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
Total Zymotic	504	272	232	153	127	55	25	21	36	5	6	5	7	7	5	12	...		
II.—Parasitic.																			
...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
III.—Dietetic.																			
Starvation, Malnutrition	13	6	7	11	2	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism, Delirium Tremens .	5	4	1	...	...	...	...	...	...	...	...	...	...	1	2	...	...
Opium, Morphia Habit ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ptomaine Poisoning ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Industrial	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poisoning—Lead ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phosphorus ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arsenic and other	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Metals ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Dietetic	18	10	8	11	2	...	...	...	...	...	...	...	...	...	1	2	...

WARD.

65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards	90 to 95	5 and upwards	North	East	West	Exchange	Bradford	Church	Great Lever	Derby	Hulton	Deane-c-m-Lostock	Runworth	Halliwell	Heaton	Smithills	Astley Bridge	Tonge	Dar. Lever c-Br'htmet
...
...	221	13	8	19	43	7	49	11	6	37	2	2	12	25	1	...	1	10	1
...	17	13	...	5	4	2	4	3	2	4	...	...	3	2	...	1	...	...	...
4	3	...	1	...	3	39	...	1	3	...	4	2	3	6	2	1	4	7	...	...	5	3	1
...	62	2	2	3	13	1	9	1	4	7	3	2	6	8	...	1	...	3	1
1	11	9	...	1	4	...	2	1	4	3	1	1	...	...	...	...	2	...	1
...	26	2	3	3	...	5	...	2	5	...	3	...	1	...	2	...	...	...
...	34	2	1	1	8	4	3	...	...	9	2	...	4	1	1	...	1	...	1
1	...	1	...	...	24	6	1	4	5	2	6	1	2	1	1	...	2	1	...	1	1	2	...
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	5	...	1	...	2	...	...	1	...	...	...	...	...	...	...	...	1	...
...	6	1	1	...	...	...	...	...	...	...	...	...	4	...	...	...	...	1
...	2	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...
...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
...	2	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
6	5	1	1	...	381	123	15	40	86	18	83	19	24	73	11	9	31	51	2	5	10	21	6
...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
...	13	...	...	4	1	...	3	...	...	1	...	...	2	1	...	...	1	...	...
...	5	1	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
...
...
...	13	5	1	6	2	...	4	...	...	1	...	...	2	1	...	...	1	...	...

CAUSES OF DEATH	Total	SEX		AGE.														
		M	F	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50
				to 1	to 2	to 3	to 4	to 5	to 10	to 15	to 20	to 25	to 30	to 35	to 40	to 45	to 50	
IV.—Constitutional.																		
Tubercular Phthisis (Pulmonary Tuberculosis) ...	155	90	65	...	1	...	...	1	2	5	7	12	19	16	16	22	17
<i>Phthisis</i>	31	14	17	...	...	...	...	...	...	...	...	5	...	4	10	1	2
Tubercular Meningitis	31	19	12	10	5	4	2	1	5	2	1	...	...	...	...	...	1
Tubercular Peritonitis	11	4	7	2	1	1	...	1	2	2	...	...	...	...	1	...	...
<i>Tabes Mesenterica</i>	8	4	4	6	2	...	...	...	...	...	...	...	...	...	...	...	...
Lupus ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tubercle of other Organs	10	5	5	1	4	...	...	...	...	...	...	1	1	1	...	...	...
General Tuberculosis	10	4	6	2	2	...	...	...	...	2	2	...	...	...	...	1	...
Scrofula ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatic Fever, Acute Rheumatism... ..	13	3	10	...	...	...	1	...	3	4	1	1	2	...	1	...	...
<i>Rheumatism of Heart</i>	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Chronic Rheumatism	11	3	8	...	...	...	...	...	...	...	...	1	...	...	1	...	...
Rheumatic Arthritis, Rheumatic Gout... ..	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gout	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Carcinoma	68	26	42	...	...	...	...	...	...	...	1	...	...	...	3	5	3
Sarcoma	4	1	3	...	...	...	...	...	...	...	...	...	1	1	...	...	...
<i>Cancer, Malignant Disease</i>	48	18	30	...	...	...	...	...	1	1	...	...	1	1	2	2	4
Rickets	7	3	4	1	2	3	...	1	...	...	...	...	...	...	...	...	...
Purpura	3	...	3	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Hæmophilia, Hæmorrhagic Diathesis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia, Leucocythæmia	17	7	10	1	1	...	...	...	...	...	...	...	1	2	2	1	2
Diabetes Mellitus	20	11	9	...	...	...	...	...	...	...	1	1	...	...	2	...	5
Total Constitutional	451	214	237	23	18	8	3	4	13	16	13	21	25	27	38	32	35	
V.—Developmental.																		
Premature Birth	105	62	43	05	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Defects	12	7	5	11	...	...	...	...	...	...	...	1	...	...	...	...	...
Injury at Birth	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	3	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Want of Breast Milk ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>Teething</i>	35	17	18	13	21	1	...	...	...	...	...	...	...	...	...	...	...
<i>Old Age, Senile Decay</i>	236	107	129	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Developmental	392	196	196	133	21	1	...	...	...	...	...	1	...	...	...	...	...
B.—Local Diseases.																		
1.—Nervous System.																		
Meningitis, Inflammation of Brain	45	21	24	12	15	3	1	4	1	2	3	...	1	...	...	1	...
Softening of Brain	7	5	2	...	...	...	...	...	...	...	...	...	...	...	1	1	...
General Paralysis of Insane Insanity (not Puerperal)	11	10	1	...	...	...	...	...	...	...	...	...	1	...	1	2	...
Chorea ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	12	4	8	...	...	...	...	...	...	...	1	1	...	2	...	3	...
<i>Convulsions</i>	75	41	34	63	8	3	...	...	...	...	...	...	...	...	...	...	...
Laryngismus Stridulus... ..	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Locomotor Ataxy	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Paraplegia and Diseases of Spinal Cord	9	6	3	...	...	...	1	...	...	...	1	...	...	...	3	...	...
Neuritis, Peripheral, Poly-neuritis.. ..	6	...	6	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Brain Tumour (not Specific) ..	8	6	2	...	...	...	...	...	1	...	1	1	...	...	1	2	...
Other Diseases of Nervous System	18	9	9	...	...	...	...	...	...	...	2	...	...	...	...	...	...
Total Nervous	196	105	91	75	23	6	2	5	2	2	8	2	2	2	7	9	...	

WARD.

60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards	0 to 5	5 and upwards	North	East	West	Exchange	Bradford	Church	Great Lever	Derby	Hulton	Deane-c'm-Lostock	Runworth	Haliwell	Heaton	Smithills	Astley Bridge	Tongue	Dar. Lever c-Br hmet
9	5	...	...	...	...	2	153	9	9	25	6	18	4	4	22	4	2	10	18	2	3	8	7	4
...	2	...	...	...	...	22	31	1	1	3	...	3	4	5	2	1	3	4	4	...	2	...	1	1
...	...	...	...	...	...	5	6	2	2	6	2	3	1	2	3	1	4	3	3	...	...	1	1	1
...	...	...	...	...	...	8	...	...	1	5	1	...	1	...	...	1	...	1	3	...	...	...	...	...
...	1	1	...	...	...	5	5	...	1	1	...	1	...	1	1	...	...	3	...	...	...	1	...	2
...	...	...	...	...	...	4	6	...	...	4	...	...	...	1	1	...	...	2	...	...	1	1	...	...
...	...	...	...	...	...	1	12	1	...	...	1	1	...	2	1	...	2	...	2	1	...	1	...	1
3	2	3	...	...	...	...	11	...	3	1	...	...	1	1	...	...	...	1	...	...	1	1	3	...
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
16	14	4	3	...	...	...	68	2	3	7	3	6	2	4	8	1	2	5	18	...	...	2	3	2
7	7	6	1	1	...	...	48	4	2	6	2	6	1	3	4	3	1	1	4	1	1	5	3	1
...	1	...	...	...	...	7	...	1	...	2	...	2	1	1	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	3	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
3	1	...	...	...	...	2	15	...	1	3	...	3	...	...	...	2	...	1	3	...	...	2	2	...
2	1	1	1	...	...	...	20	...	2	6	...	1	1	1	1	2	...	3	...	...	2	2	1	...
40	35	15	5	1	...	56	395	23	26	69	18	47	16	23	45	16	8	25	66	4	8	24	20	13
...	...	...	...	...	...	105	...	4	7	12	5	10	2	9	13	3	...	10	13	2	3	5	6	1
...	...	...	...	...	...	11	1	1	2	1	...	1	2	1	3	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
...	...	...	...	...	...	3	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	35	...	1	2	2	...	7	5	2	...	2	...	2	0	...	...	3	2	1
5	29	61	63	54	21	...	236	6	14	32	6	18	19	13	27	6	4	14	27	4	17	10	13	6
5	29	61	63	54	21	155	237	13	25	47	11	36	28	26	43	11	4	27	46	6	20	18	22	9
...	1	...	...	...	...	35	10	3	7	4	...	9	2	2	2	3	1	1	3	...	1	2	5	...
...	1	3	...	...	...	...	7	...	...	1	...	1	1	1	1	...	...	1	1	...	...	1	...	...
1	2	1	...	...	...	...	11	...	...	3	1	1	...	1	...	...	...	3	...	1	...	1	1	...
...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	12	1	1	3	...	3	...	1	...	1	...	1	...	...	...	...	...	1
...	...	...	...	...	...	74	1	1	7	14	2	11	1	3	7	...	3	3	13	...	4	2	2	2
1	...	1	...	...	...	...	3	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	1	...
2	...	1	...	...	...	1	8	...	...	1	1	2	...	...	2	...	...	1	...	...	1	...	1	1
3	...	...	...	...	...	...	6	1	...	...	...	...	...	2	1	...	1	1	...	...	...	...	...	...
1	...	...	...	...	...	...	8	...	...	1	...	2	...	...	1	...	1	...	...	...	...	1	2	...
2	...	1	5	...	...	...	18	1	...	2	...	2	2	1	2	1	...	4	...	3	...	...	...	...
0	5	7	5	...	...	111	85	7	15	31	4	31	7	11	16	6	4	6	27	...	9	7	11	4

CAUSES OF DEATH	Total	SEX		AGE.															
		M	F	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	
				to 1	to 2	to 3	to 4	to 5	to 10	to 15	to 20	to 25	to 30	to 35	to 40	to 45	to 50		
II.—Organs of Special Sense.																			
Otitis, Mastoid Disease ...	11	3	8	3	1	1	...	...	1	1	1	2	...	...	1	...	...
Epistaxis, Nose Disease ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia, Eye Disease ...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Organs of Special Sense	12	4	8	4	1	1	...	...	1	1	1	2	...	...	1	...	...
III.—Heart.																			
Valvular Disease, Endocarditis (not Infective) ...	48	19	29	...	...	...	...	...	1	4	4	4	3	2	2	4	...
Pericarditis ...	3	1	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Hypertrophy of Heart ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angina Pectoris... ..	5	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dilatation of Heart ...	17	8	9	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Fatty Degeneration of Heart ...	6	2	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Syncope. Heart Disease (not Specified) ...	137	66	71	8	...	...	...	1	4	5	2	3	4	4	8	4	1
Total Diseases of Heart ...	216	100	116	8	...	...	...	1	5	9	6	7	9	7	10	9	2
IV.—Blood Vessels.																			
Cerebral Hæmorrhage, Embolism, Thrombosis...	80	34	46	1	...	...	...	...	...	...	...	1	1	4	1	...	...
Apoplexy, Hemiplegia ...	50	19	31	...	...	...	...	...	...	...	...	1	...	...	1	...	...
Aneurism ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Senile Gangrene ...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Embolism, Thrombosis (not Cerebral)...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phlebitis ...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Varicose Veins ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blood Vessels (other Diseases of)	5	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Diseases of Blood Vessels...	140	56	84	1	...	...	...	...	...	...	...	2	1	5	2	...	...
V.—Respiratory System.																			
Laryngitis ...	5	3	2	1	1	...	2	1	...	...	...	...	...	...	...	...	...
Membranous Laryngitis (not Diphtheritic) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup (not Spasmodic or Membranous)...	5	1	4	...	1	...	1	1	1	1	...	...	...	...	...	...	...
Other Diseases of Larynx (not Specified) ...	2	2	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...
Bronchitis ...	298	144	154	53	12	1	3	2	2	...	...	1	8	7	8	...	...
Lobar and Croupous Pneumonia	33	20	13	3	3	1	1	...	2	...	...	3	1	3	4	3	...
Broncho, Catarrhal and Lobular Pneumonia	103	46	57	31	29	10	8	2	5	1	1	4	...	...	2	1	...
Pneumonia ...	108	67	41	8	6	5	3	1	3	3	5	6	1	12	7	8	...		
Emphysema, Asthma ...	10	7	3	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Pleurisy ...	22	14	8	3	1	1	...	...	...	...	1	...	...	2	4	...	...
Fibroid Disease of Lung ...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Other Diseases of Respiratory System. ...	10	6	4	1	...	...	...	1	...	1	...	...	...	...	...	2	...
Total Diseases of Respiratory System ...	598	312	286	100	53	18	18	8	14	5	7	15	4	23	22	27	...		

		WARD.																						
60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards	90 to 95	95 and upwards	North	East	West	Exchange	Bradford	Church	Great Lever	Derby	Hulton	Deane-c-m-Lostock	Rumworth	Halliwell	Heaton	Smithills	Astley Bridge	Tonge	Dar. Lever c-Br-hmct.
...	...	...	...	...	...	5	6	1	1	4	...	3	1	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
...	...	...	...	...	...	6	6	1	1	4	...	3	1	...	...	...	...	...	1	...	...	...	...	1
7	1	1	...	...	...	...	48	2	3	6	1	5	1	5	5	1	1	4	7	...	...	1	4	2
...	1	...	...	...	...	...	3	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
1	...	2	...	...	...	...	5	...	2	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...
1	1	2	...	...	...	...	17	1	1	3	...	3	1	1	1	...	...	1	3	...	...	1	1	...
...	2	...	...	...	...	...	6	...	...	...	1	...	...	1	2	...	...	1	...	...	...	...	1	...
9	21	9	10	1	...	9	128	2	10	15	6	13	9	7	17	3	2	7	14	2	6	11	6	2
8	26	14	10	1	...	9	207	5	17	25	8	26	12	14	25	5	3	14	25	2	6	13	12	4
13	13	10	5	1	1	1	79	7	2	15	...	9	3	3	8	2	2	2	8	...	4	11	2	2
11	12	5	6	1	...	...	50	4	7	7	2	6	4	2	4	1	...	2	4	1	4	...	2	...
...
...	1	1	...	...	...	...	2	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...
1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
1	1	...	2	...	...	...	5	...	...	3	...	1	...	...	1	...	...	...	1	...	...	...	...	...
26	27	16	13	2	1	1	139	11	9	26	2	17	7	5	13	3	2	4	14	1	8	12	4	2
...	...	...	...	...	...	5	...	...	1	...	...	...	...	...	...	...	...	...	2	...	...	2	...	...
...
...	...	...	...	...	...	3	2	...	...	2	...	...	...	...	2	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
35	39	32	13	9	...	71	227	12	29	51	11	38	12	20	35	7	5	7	30	2	5	10	12	12
2	1	1	1	...	...	8	25	1	3	9	1	3	3	...	2	...	...	...	6	...	1	3	1	...
2	...	3	...	1	...	80	23	4	11	19	4	18	1	3	10	1	1	4	17	...	2	5	1	2
5	9	5	1	1	...	23	85	3	10	11	2	16	4	11	12	1	1	7	14	...	1	1	5	3
3	2	...	...	1	...	...	10	2	...	2	...	...	1	1	2	...	1	...	1	...	...	...	...	...
2	2	...	...	...	...	5	17	...	1	5	...	3	2	3	1	1	...	...	5	...	...	...	1	...
1	...	...	...	...	...	...	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	1	9	1	1	1	...	1	3	1	1	...	...	...	1	...	...	...	...	...
51	53	41	15	12	...	197	401	24	56	101	24	79	26	39	65	11	8	18	76	2	9	21	22	17

CAUSES OF DEATH.	Total	SEX		AGE.													
		M.	F.	0	1	2	3	4	5	10	15	20	25	30	35	40	45
				to 1	to 2	to 3	to 4	to 5	to 10	to 15	to 20	to 25	to 30	to 35	to 40	to 45	to 50
VI.—Digestive System.																	
Tonsillitis, Quinsy ...	3	3	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...
Mouth, Pharynx Disease (not Specified) ...	2	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Gastric Ulcer ...	11	5	6	...	...	...	...	...	1	...	...	...	3	...	2	2	...
<i>Gastritis Gastric Catarrh, Gastro-Intestinal Catarrh</i> ...	20	13	7	11	2	...	...	...	...	...	...	...	1	1	...	...	...
Other Diseases of Stomach (not Malignant) ...	21	13	8	8	3	...	...	...	...	...	...	1	2	...	...	...	2
Enteritis (not Epidemic) ...	23	15	13	15	5	2	1	...	...	...	...	...	1	...	...	...	...
<i>Gastro-Enteritis</i> ...	5	2	3	4	...	...	...	...	1	...	...	...	...	...	...	...	...
Appendicitis, Perityphlitis ...	15	7	8	...	...	...	...	...	...	5	1	2	...	3	...	1	2
Hernia ...	13	9	9	1	...	1	1	...	...	...	...	...	...	...	...	1	...
Intestinal Obstruction ...	11	5	6	...	...	...	...	...	...	...	...	...	1	...	...	1	...
Other Diseases of Intestines ...	9	9	...	2	1	...	...	...	1	...	...	...	...	...	1	1	...
Peritonitis (not Puerperal) ...	3	2	1	...	...	...	...	...	1	...	1	...	...	...	...	...	1
Cirrhosis of Liver ...	25	10	15	...	...	...	...	...	...	...	...	...	...	...	2	3	3
Other Diseases of Liver and Gall Bladder ...	14	4	7	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Other Diseases of Digestive System ...	6	4	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Diseases of Digestive System ...	188	102	86	46	13	4	2	...	4	5	2	3	8	5	5	9	9
VII.—Lymphatic System & Ductless Glands.																	
Spleen Disease ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Lymphatic System ...	7	6	1	1	1	...	...	...	...	1	...	1	...	...	...	...	...
Thyroid Body Disease ...	3	2	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...
Suprarenal Capsules Disease ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Diseases of Lymphatic System & Ductless Glands ...	10	8	2	1	1	...	...	...	1	1	1	1	...	...	...	...	...
VIII.—Urinary System.																	
Acute Nephritis... ..	23	15	8	2	2	1	...	1	1	1	...	...	2	...	2	3	11
Chronic Bright's Disease, Albuminuria ...	77	44	33	1	...	...	...	1	...	...	...	3	2	4	3	8	44
Calculus (Not Biliary) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bladder and Prostrate Disease...	4	2	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Other Diseases of Urinary System ...	4	2	2	...	...	...	...	...	...	...	...	...	2	...	...	1	1
Total Dis. of Urinary System ..	103	63	45	3	2	1	...	2	1	1	...	4	6	4	5	12	6
IX.—Generative System																	
Ovarian Tumour (not Malignant) ...	3	...	3	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Other Diseases of Ovary ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uterine Tumour (not Malignant) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Uterus and Vagina ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disorders of Menstruation ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Generative and Mammary Organs...	4	2	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Total Diseases of Generative System...	7	2	5	...	...	...	...	...	...	...	...	1	1	...	...	...	1
X.—Pregnancy and Childbirth.																	
Abortion, Miscarriage ...	3	...	3	...	...	...	...	...	...	...	...	...	2	...	1	...	...
Puerperal Mania ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Convulsions...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Placenta Prævia, Flooding, Accidental Hæmorrhage...	3	...	3	...	...	...	...	...	...	...	...	...	...	...	2	1	...
Other Accidents of Pregnancy and Childbirth ...	17	...	17	...	...	...	...	...	...	...	...	2	3	9	2	1	...
Total Accidents of Pregnancy and Childbirth ...	24	...	24	...	...	...	...	...	...	...	...	2	5	10	5	2	...

WARD.

60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards	0 to 5	5 and upwards	North	East	West	Exchange	Bradford	Church	Great Lever	Derby	Hulton	Deane-c-m-Lostock	Rumworth	Hallwell	Heaton	Smithills	Astley Bridge	Tonge	Dar. Lever c-Brhtmet.	
...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...
1	2	11	1	...	4	...	1	...	1	3	1	...	1	...
1	2	1	...	...	...	13	7	1	...	4	1	1	...	...	5	1	...	2	1	...	...	...	2	2
2	1	1	...	...	...	11	10	1	2	2	3	2	2	...	...	1	1	...	4	...	...	3	...	...
...	1	...	...	...	...	23	5	1	2	2	...	9	...	1	4	...	...	...	6	1	...	...	1	1
...	...	...	...	...	...	4	1	...	...	2	1	...	...	...	...	...	...	...	1	...	1	...	...	...
...	...	...	...	...	...	...	15	2	...	2	1	...	...	1	1	...	...	1	3	...	1	2	1	...
4	1	2	...	...	...	3	15	1	1	5	...	1	1	1	3	1	...	...	2	...	...	1	1	...
2	2	2	1	...	...	...	11	...	...	3	...	...	1	...	1	...	1	1	1	1	...	1	2	...
1	1	...	1	...	...	3	6	...	...	4	...	1	...	...	2	...	...	...	1	...	1	...	...	...
...	...	...	...	...	...	...	3	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...
5	1	...	...	...	...	...	25	...	6	4	1	4	1	2	...	1	...	...	5	...	...	...	1	...
3	1	2	1	...	1	...	11	...	...	1	...	...	2	2	1	...	1	...	2	...	...	...	1	1
...	...	1	...	...	...	3	3	...	2	...	...	...	...	1	1	...	...	1	...	...	...	...	1	...
19	10	9	3	...	1	65	123	6	13	31	7	23	7	10	19	5	3	5	31	1	5	8	10	4	
...
2	...	...	...	...	...	2	5	1	...	1	...	2	...	...	1	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	3	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...
2	...	...	...	...	...	2	8	1	...	3	...	2	...	...	1	1	...	...	1	...	...	...	1	...
1	2	3	...	...	...	6	17	...	1	7	1	4	...	2	1	1	1	2	2	...	...	1	...	...
11	6	8	2	...	1	2	75	4	3	16	2	4	4	5	10	2	1	3	10	...	3	3	5	2	
...	
...	2	1	...	...	...	...	4	1	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...
...	...	...	...	...	...	...	4	...	...	...	1	1	...	...	1	...	...	...	1	...	...	...	...	...
12	10	12	2	...	1	8	100	5	4	23	4	9	4	7	13	3	2	6	14	...	3	4	5	2	
...	...	1	...	...	...	...	3	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...
...	
...	
1	1	...	...	...	...	...	4	...	1	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...
1	1	1	...	...	...	...	7	...	1	2	1	...	1	1	...	...	...	1	...	...	...	...	...	...
...	...	...	...	...	...	...	3	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...
...	...	...	...	...	...	...	17	...	1	3	...	1	1	1	3	2	...	2	1	1	...	1	...	...
...	...	...	...	...	...	...	24	...	1	3	...	2	1	1	5	3	...	2	2	1	...	2	1	...

CAUSES OF DEATH.	Total	SEX		AGE.													
		M.	F.	0	1	2	3	4	5	10	15	20	25	30	35	40	45
				to 1	to 2	to 3	to 4	to 5	to 10	to 15	to 20	to 25	to 30	to 35	to 40	to 45	to 50
XI.—Locomotor System.																	
Caries, Necrosis	6	3	3	...	...	...	2	...	...	1	1	...	...	1	...	...	...
Arthritis, Periostitis	4	2	2	...	...	...	...	...	1	...	...	...	1	...	...	...	...
Other Diseases of Locomotor System ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Diseases of Locomotor System	10	5	5	...	...	...	2	...	1	1	1	...	1	1	...	...	...
XII.—Skin.																	
Ulcer, Bedsore	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eczema	4	2	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Pemphigus	3	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	1
Other Skin Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Diseases of Skin... ..	8	3	5	5	...	...	...	...	...	...	...	...	...	...	...	...	1
C.—Other Specified Diseases.																	
D.—Ill-defined and not Specified Diseases.																	
Atrophy, Debility, Marasmus	80	45	35	78	...	1	...	...	1	...	...	...	...	...	...	...	...
Dropsy, Ascites, Anasarca	2	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Tumour ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscess	3	2	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...
Hæmorrhage ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudden Causes (causes unascertained) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Ill-defined Diseases	2	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Ill-defined and not Specified Causes	87	49	38	80	1	1	...	...	1	1	...	...	...	...	...	...	...
E.—Violent Causes.																	
1.—Accident.																	
In Mines and Quarries... ..	3	3	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...
Vehicles and Horses	6	5	1	...	...	...	1	1	...	...	...	...	...	2	...	...	...
Ships, Boats, Docks (not Drowning) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Building Operations ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Machinery	7	6	1	...	...	...	...	...	...	1	...	1	2	1	...	...	2
Weapons and Implements	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Burns and Scalds	13	5	8	1	...	2	1	2	2	...	2	...	...	1	...	1	...
Poison, Poisonous Vapours ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Drowning	6	3	3	...	1	...	...	...	...	1	...	1	...	...	...	...	...
Suffocation	7	4	3	6	...	...	...	1	...	...	...	...	...	...	...	...	...
Falls	27	13	14	...	1	...	...	...	...	1	2	...	2	2	1	1	1
Weather Agencies ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Otherwise or not Stated	16	10	6	1	...	...	1	...	...	2	1	...	1	2	...	1	1
2.—Homicide.																	
3.—Suicide.																	
4.—Execution.																	
Total Violent Deaths	103	61	42	8	...	4	3	4	2	5	6	2	8	10	4	6	6
Total from all Causes	3073	1563	1510	652	262	99	55	45	81	52	51	66	78	96	108	122	137

WARD.

	60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards	0 to 5	5 and upwards	North	East	West	Exchange	Bradford	Church	Great Lever	Derby	Hulton	Deane-c-m-Lostock	Rumworth	Halliwell	Heaton	Smithills	Astley Bridge	Tonge	Dar. Lever c-Br hmet.
							2	4	1		1		2			1				1					
								4					3												1
2							2	8	1		1		5			1				1					1
		1						1				1													
					1		3	1			2		1			1									
							2	1			1								2						
		1			1		5	3			3		2			1			2						
							79	1	1	8	17	7	15	3	1	8	2		3	8	1	2	2	1	1
							1	1			1							1							
													1			1								1	
							1	2																	
		1					1	1						1						1					
1		1					82	5	1	8	18	7	16	4	1	9	2		4	9	1	2	2	2	1
								3		2								1							
			1				2	4							1	2			1	1	1				
								7	1				3			2									1
								1			1														
							6	7	1	3	3	1	1				1		2						1
		1					1	5	1		1			2						1					1
											3	1		2											
3	1	4	2		2	1	26		1	5	2	6	1	1					2	4		1	3		1
								2			2		2	2	2	4						1	1	1	
8	5	5	4		2	1	19	84	4	11	16	3	17	6	5	11	1	1	5	6	2	5	5	1	4
70	205	209	185	117	74	25	1113	1960	118	233	491	107	402	139	167	342	78	44	152	371	22	80	127	132	68

TABLE II.

POPULATION, BIRTHS AND DEATHS IN PREVIOUS YEARS.

Year	Population estimated to Middle of each Year	Births		Total Deaths registered in the District				Total Deaths in Public Institutions in the District	Deaths of Non-residents Registered in Public Institutions in District	Deaths of Residents Registered in Public Institutions beyond District	Net Deaths at all Ages belonging to the District	
		Number	Rate	Under 1 year of age		At all ages					Number	Rate
				Number	Rate per 1000 Births Registered	Number	Rate					
1897	121433	3985	32.8	728	182	2485	20.4	71	18	204	2671	21.9
1898	122495	3800	31.0	632	166	2196	17.9	81	31	185	2350	19.1
1899	162222	4878	30.0	864	177	2971	18.3	116	17	284	3238	19.9
1900	164240	4775	29.0	806	168	2952	17.9	119	16	285	3222	19.6
1901	168748	4648	27.5	794	170	2864	16.9	128	24	245	3085	18.2
1902	171082	4779	27.9	626	130	2741	16.0	160	31	240	2959	17.2
1903	173401	4700	27.1	704	149	2768	15.9	136	18	312	3062	17.6
1904	175744	4736	26.9	775	163	2743	15.6	129	28	279	2994	17.0
1905	178111	4481	25.1	724	161	2492	13.9	138	26	288	2754	15.4
1906	180502	4599	25.4	631	137	2551	14.1	138	27	270	2794	15.4
Averages for years 1897-1906.	161797	4538	28.2	728	160	2676	16.6	121	23	259	2912	18.1
1907	182917	4476	24.4	646	144	2795	15.2	174	28	306	3073	16.7

CENSUS, 1901.

Total Population at all ages	...	...	...	...	168,215
Number of Inhabited Houses	...	...	...	...	35,995
Average Number of Persons per House	...	...	...	...	4.6

TABLE III.

WARD POPULATIONS, BIRTHS, AND DEATHS.

Names of Wards	Borough				North				East				West				Exchange				Bradford			
	Population esti- mated to Middle of each year	Births Registered	Deaths at all Ages	Deaths under 1 Year	Population esti- mated to Middle of each year	Births Registered	Deaths at all Ages	Deaths under 1 Year	Population esti- mated to Middle of each year	Births Registered	Deaths at all Ages	Deaths under 1 Year	Population esti- mated to Middle of each year	Births Registered	Deaths at all Ages	Deaths under 1 Year	Population esti- mated to Middle of each year	Births Registered	Deaths at all Ages	Deaths under 1 Year	Population esti- mated to Middle of each year	Births Registered	Deaths at all Ages	Deaths under 1 Year
1897.....	121433	3955	2671	732	6943	223	155	40	11313	353	315	86	27225	862	549	156	7252	230	193	56	18952	682	442	127
1898.....	122495	3800	2350	638	6993	220	124	33	11313	349	237	69	27438	765	448	120	7250	216	178	47	19018	643	382	109
1899.....	102222	4878	3238	886	7036	213	127	41	11313	354	267	75	27627	784	556	142	7250	188	149	45	19068	600	391	104
1900.....	164240	4775	3222	814	7200	217	137	41	11000	338	276	60	28370	714	544	127	6750	167	147	39	19440	599	383	104
1901.....	168748	4648	3085	800	7386	179	118	22	10654	320	257	74	27290	695	451	106	5874	132	156	38	19852	636	441	118
1902.....	171082	4779	2959	633	7452	209	142	24	10556	312	245	57	27343	708	430	87	5724	173	150	28	19915	627	430	110
1903.....	173401	4700	3062	713	7520	203	141	33	10400	324	249	50	27410	684	469	121	5535	115	119	20	19980	651	401	111
1904.....	175744	4736	2994	792	7560	198	122	30	10275	312	231	70	27572	670	496	131	5331	151	101	34	20110	600	379	99
1905.....	178111	4481	2754	744	7600	175	97	25	10140	339	211	65	27705	677	436	115	5130	144	101	30	20220	572	363	110
1906.....	18c502	4599	2794	636	7710	194	104	27	10040	300	207	51	27840	709	477	123	4950	132	96	15	20330	603	386	101
Averages of years 1897 to 1906	161797	4538	2912	738	7340	203	126	31	10700	330	249	65	27582	726	485	122	6104	164	139	35	19688	621	399	109
1907.....	182917	4476	3073	652	7810	186	118	15	9940	322	233	64	27960	691	491	106	4770	125	107	30	20430	547	402	102

TABLE III (Continued).

WARD POPULATIONS, BIRTHS, AND DEATHS.

Names of Wards.	Church				Great Lever				Derby				Hulton				Deane-cum-Lostock				Rumworth			
	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year
1897.....	9665	204	167	31	18302	656	383	101	18483	640	370	118	Statistics not available	Statistics not available	Statistics not available	Statistics not available	5759	173	114	27	5891	230	145	42
1898.....	9820	169	149	20	18029	645	405	119	19190	607	424	119	4124	115	87	32	2787	86	69	23	5995	217	135	36
1899.....	9936	175	153	31	7744	247	136	31	9098	230	139	31	4300	132	82	23	2700	98	55	16	6400	235	144	46
1900.....	8760	161	143	25	7700	244	129	32	10171	591	370	114	4545	135	77	29	3203	96	39	12	7263	220	164	44
1901.....	8607	155	134	31	9433	252	129	23	19470	561	349	95	4684	163	73	21	3209	92	36	8	7590	233	124	31
1902.....	8604	172	158	24	9900	236	150	34	19685	601	360	103	4820	150	78	13	3215	80	51	9	7925	249	129	29
1903.....	8550	171	139	26	10290	234	130	36	19870	545	343	93	4950	142	81	17	3231	81	60	5	8165	246	163	53
1904.....	8545	168	138	38	10697	214	159	30	20120	555	344	87	5080	146	79	27	3245	82	49	13	8415	224	122	43
1905.....	8540	139	102	18	11050	237	121	21	19223	601	371	105	5205	152	58	14	3250	89	32	8	8805	229	125	35
1906.....	8537	164	135	17																				
Averages of Years 1897 to 1906	8956	167	141	26	19223	601	371	105	19223	601	371	105									7220	225	136	38
1907.....	8534	169	139	16	11428	240	167	33	20320	536	342	70	5330	137	78	19	3255	72	44	7	9205	241	152	37

WARD POPULATIONS, BIRTHS, AND DEATHS.

Names of Wards	Halliwell				Heaton				Smithills				Astley Bridge				Tonge				Darcy Lever-cum-Brightmet			
	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year	Population estimated to Middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year
1897.....	16022	603	353	108	} Statistics not available																			
1898.....	16289	568	317	80																				
1899.....	16487	564	355	110	1516	35	22	1	3471	112	64	17	7496	183	122	24	7904	277	149	34	3849	83	54	15
1900.....	17540	566	361	88	1530	29	25	1	3600	102	61	14	7510	188	109	21	8400	284	126	43	3850	94	76	15
1901.....	19746	591	349	87	1902	38	24	4	4412	121	54	13	7707	160	110	29	8562	260	147	37	3566	89	55	11
1902.....	20390	577	283	51	1930	38	31	5	4614	90	68	11	7849	194	137	25	8920	236	99	17	3554	87	57	7
1903.....	21070	572	339	75	1960	37	33	4	4830	138	87	25	7995	176	122	24	9301	256	141	29	3520	97	65	15
1904.....	21635	619	307	76	1994	57	41	10	5010	133	59	17	8155	180	111	22	9725	256	139	31	3508	108	67	15
1905.....	22305	529	303	96	2035	48	25	4	5187	143	74	14	8312	186	118	18	10145	239	117	27	3485	79	56	10
1906.....	22905	573	314	64	2050	46	33	4	5350	117	73	11	8440	188	111	17	10440	227	113	25	3480	90	65	13
Averages of Years 1897 to 1906	19438	576	328	83																				
1907.....	23580	536	371	80	2063	31	22	3	5522	119	80	11	8540	178	127	22	10755	260	132	23	3475	86	68	8

TABLE V.
CAUSES OF, AND AGES AT, DEATH DURING YEAR 1907.

Causes of Death	Deaths at the subjoined Ages of "Residents" whether occurring in or beyond the District.										Deaths at all Ages of "Residents" belonging to Localities, whether occurring in or beyond the District.										Total Deaths whether of "Residents" or "Non-Residents" in Public Institutions in the District.					
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	North	East	West	Exchange	Bradford	Church	Great Lever	Derby	Hulton	Leane-cum-Loxlock	Rumworth	Halliwell	Heaton		Smithills	Astley Bridge	Tonge	Dar.L.-cum-Breighmet	

Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	234	64	157	12	1	...	...	8	19	43	7	49	11	6	37	2	2	12	25	1	...	1	10	1	1
Scarlet Fever	30	...	17	12	1	...	...	...	5	4	2	4	3	2	4	...	...	3	2	...	1	...	...	...	18
Whooping-cough	64	30	32	2	...	...	...	2	3	13	1	9	1	4	7	3	2	6	8	...	1	...	3	...	...
Diphtheria (including Membranous Group)	20	3	8	7	1	1	1	...	1	4	...	2	1	4	3	1	1	...	...	...	...	2	...	1	1
Croup	5	...	3	2	...	...	...	...	...	2	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...
Fever { Typhus Enteric... Other continued	26	...	...	5	6	15	...	2	3	3	...	5	...	2	5	...	3	...	1	...	2	...	...	...	11
Epidemic Influenza	42	2	1	3	2	26	8	...	1	3	...	4	2	3	6	2	1	4	7	...	...	5	3	1	...
Cholera
Plague
Diarrhoea	66	47	11	...	...	6	2	...	5	13	6	9	1	2	10	3	...	6	2	1	1	2	2	1	...
Enteritis...	53	30	10	1	...	8	4	2	2	8	2	10	...	1	9	1	...	2	8	1	1	2	3	3	...	
Puerperal Fever...	9	...	...	...	...	9	...	1	1	1	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...
Erysipelas	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases	5	2	2	...	...	...	1	...	1	...	...	1	...	...	1	...	...	...	1	...	...	...	1	...	1
Phthisis (Pul. Tuberc.)	186	...	2	7	24	146	7	10	10	28	6	21	8	9	24	5	3	13	22	2	5	8	7	5	...	
Other Tuberc. Diseases	70	21	23	13	4	7	2	4	4	16	6	5	2	3	5	2	4	4	12	1	1	3	1	2	...	
Cancer, Malign. Disease	120	...	18	2	1	81	36	6	5	13	5	13	3	7	13	4	3	6	23	1	1	7	6	4	7	
Bronchitis	298	53	18	2	...	132	93	12	29	51	11	38	12	20	35	7	5	7	30	2	5	10	12	12	...	
Pneumonia	244	42	69	14	19	77	23	8	24	39	13	37	8	14	24	2	2	11	37	...	4	9	7	5	4	
Pleurisy	22	3	2	...	1	14	2	...	1	5	...	3	2	3	1	1	...	...	5	...	...	...	1	...	2
Other Diseases of Respiratory Organs.	29	2	5	1	2	16	3	4	2	4	...	1	4	2	3	1	1	4	...	...	...	2	1	...	...
Alcoholism	30	...	...	...	...	29	1	1	8	5	1	5	1	2	...	1	...	...	5	...	...	...	1	...	...
Cirrhosis of Liver	5	5	...	...	...	...	...	...	1	...	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases	105	105	...	...	...	...	...	4	7	12	5	10	2	9	13	3	...	10	13	2	3	5	6	1	...
Premature Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases and Accidents of Parturition	24	...	...	...	2	22	...	...	1	3	...	2	1	1	5	3	...	2	2	1	...	2	1	...	...
Heart Diseases	216	8	1	14	13	129	51	5	17	25	8	26	12	14	25	5	3	14	25	2	6	13	12	4	5	
Accidents	86	8	11	7	8	41	11	3	9	13	3	14	5	4	9	1	1	4	6	2	3	4	1	4	41	
Suicides	17	...	...	...	...	16	1	1	2	3	...	3	1	1	2	...	...	1	...	...	2	1	...	...	2
All other causes	1066	227	89	29	32	325	364	43	72	179	29	131	59	53	99	31	17	43	132	7	44	53	52	22	73	
All causes	3073	652	461	133	117	1100	610	118	233	491	107	402	139	167	342	78	44	152	371	22	80	127	132	68	174	

TABLE .VI.

INFANTILE MORTALITY DURING THE YEAR 1907.

DEATHS FROM STATED CAUSES, IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

Cause of Death	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year
	116	24	27	26	193	56	36	43	40	50	42	38	47	31	36	33	645
All Causes	7	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	7
I. Common Infectious Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea, all forms	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteritis, Muco-enteritis, Gastro-enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth	69	8	10	6	93	6	3	1	1	1	...	...	...	...	...	...	105
Congenital Defects	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
Injury at Birth...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Want of Breast-milk, Starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy, Debility, Marasmus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	20	5	3	8	36	11	4	7	5	4	7	1	1	...	...	...	78
Tuberculous Peritonitis: Tabes Mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rickets...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Convulsions	15	3	3	2	23	7	4	8	2	11	3	1	3	1	1	...	12
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Causes	9	4	4	2	19	7	6	5	10	5	2	9	5	2	4	...	76
V. Other Causes	123	24	27	26	200	56	36	43	40	50	42	38	47	31	36	33	652

Births in the year—Legitimate 4 476; Illegitimate, 171. Deaths from all Causes at all Ages, 3,073. Population, estimated to middle of 1907, 182,917.

1891

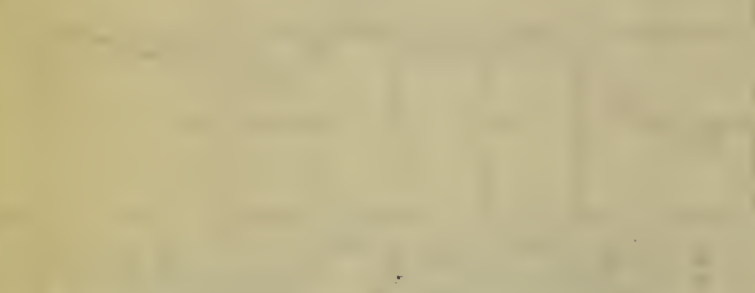
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